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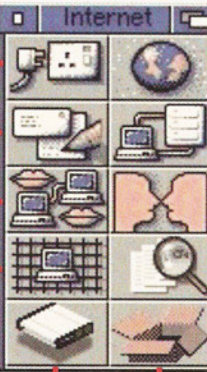
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All You Need For Internet And Comms!

netconnect v2 £59.95

NetConnect v2 is the easiest and most comprehensive Internet compilation designed to enable any Amiga user, from novice to expert level, to get onto and use the Internet. Based around 11 commercial programs (including the Contact Manager), and worth over £150 if bought separately, you are given all you will need to get the most from the Internet. By using the new Genesis Wizard, a user should be able connect to the Internet in a matter of minutes. Ideal for both an Internet or local area network connection.

11 Commercial Programs within NetConnect v2!



AMITCP-GENESIS
NetConnect v2 users will be the first people to use this new TCP stack! Based on AmiTCP Pro, we have added a number of changes - new Wizard, MUI based dialler, multi-user support, 'events' control, status window (time on 'net, connection speed), new prefs.

MICRODOT-II
A superb combined email and newsreader within one GUI! Contains all the major features you would expect - MIME attachments, support for POP3/APOP, search function, multiple signatures, multiple user support, Arexx port etc.

AMIRC
Chat online with friends about topics, join conferences, organise mass meetings. The IRC is one of the most addictive elements of the Internet - AmIRC is the best Amiga IRC client.

AMTELNET
Telnet into remote computers (from anywhere in the world) - edit files on a computer in Germany from your Amiga, maintain directories for your web pages, check the status of the network, play online games.

AMTERM
AmTerm is a communications package which allows you to connect to a BBS, to another user (direct link), transfer files via a serial connection (Amiga<>Amiga, Amiga<>PC etc).

VOYAGER-NG
Voted the best Amiga web browser by CU Amiga - supports SSL for securing ordering, HTTP 1.1 (for the fastest web access) fastmem AGA support (use fast mem to store images) and very soon JAVA™, Javascript and AGA fastmem support!

AMFTP
AmFTP is the ultimate Amiga FTP client. Download/upload programs from any FTP site, also supports ADT to allow you to download the latest files from the Aminet and Archie to search FTP sites for files.

AMTALK
A direct chat client for the Amiga. Acts as an online answerphone service for people to leave messages. You can talk directly 'real-time' to friends on the Internet.

NETINFO
NetInfo is a cool tool for analysing the network and the people connected to it - 'finger' your friends to see if they are online, 'ping' servers to find the response speed.

X-ARC
X-Arc is the Amiga's answer to WinZIP™ - automatically decode LHA/LZX/ZIP files, edit the contents of these archives, create your own archives. Full integrates with NetConnect v2!

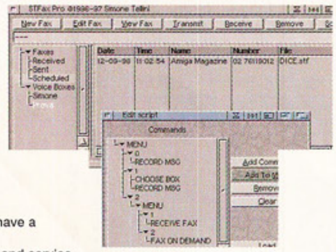
Plus much more..

- **Setup Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic! Easy setup of more than one network interface - use more than one ISP or setup a Local Area Network (for the Siamese).
- **MIME Prefs** - Central MIME prefs interface means that you only need to setup file types once with on nice interface! This saves masses of time and effort (especially for beginners).
- **Control Manager** - A central control manager that allows you to store your favourite web and ftp sites, IRC servers/channels, friends, email addresses, fax numbers and then use them within various NetConnect modules - Voyager, Microdot-II, AmFTP and AmIRC! Also compatible with STFax Pro.
- **Multi-User System** - Use Genesis/NetConnect with more than one user (a family) and log in on startup, use your own preferences, your own account(s) within Microdot-II etc.
- **New programs** - AmTalk, NetInfo, Contact Manager and X-Arc (a brand new WinZIP™ style archive management tool. Downloads lha/lzx/zip files from Voyager etc, auto-extracts them into X-Arc's GUI, manage the files - copy them to you HD, add to the archive, delete from within the archive etc).
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras pre-configured:** MIME types (CD only), datatypes (CD Only), online help files etc
- **Dock bar** - allows you to create multiple dock bars with point and click ease - just drag the icons you have created into the icon bar! NetConnect v2 is pre-setup with its own icon bar for ease of use.
- **Printed manual** - understand NetConnect and the Internet quickly and easily (advice from NC users!)

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more]	£59.95
NetConnect v2 Floppy Disks [only contains the core programs & online help documents]	£59.95
NetConnect v2 Upgrade from v1 [registered NetConnect v1 users only]	£call!

stfax professional (new version 3.2) £29.95

STFax Professional is new commercial fax and voice mail program for the Amiga containing the advanced features you would find within commercial PC fax/voice software. Use your Amiga as a digital answer machine, create a fax on demand service (ideal for small businesses. Allows your customers to contact you at any time and use fax on demand to remotely download facsimile information about your products!) and create advanced voice control scripts. Ever wondered who companies manage to create their voice based operator system? You can do this at home! Ideal for a small business: 'Press one on your keypad to leave a message, press two call an operator, press three to list available faxes'.

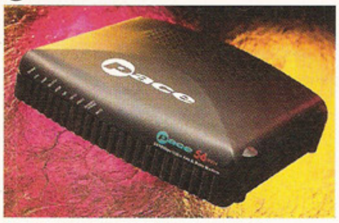


- **Full Fax Features:**
  - Support for all fax/modem classes (1, 2, 2.0)
  - Phonebook (store all your fax and telephone numbers)
  - Scheduler (store fax messages to send at specified times)
  - Reports (quickly see when a fax was sent and received)
  - Datatypes support for image conversion
  - Printer driver to redirect all print-outs to a fax file (print from Wordworth, Pagestream, Final Writer, a text editor etc!)
  - Viewer for viewing outgoing/incoming fax messages
  - Fax forward (forward faxes to another machine)
- **Advanced Voice Features:**
  - Use your Amiga as an answer machine (digital messages, unlimited storage space!)
  - Multiple-User - assign voiceboxes to individual users. A family could have a voicebox per member and receive their own voice messages.
  - Advanced voice scripting - create your own voice network/fax on demand service
  - Use your modem as a telephone (make and receive calls via STFax Pro and your modem)
  - Remote access (listen to your messages from an external source. ie. from another phone or even country!)
  - Caller-ID - see who is calling you and choose to intercept the call, see who has left a message and choose to respond via the modem, attach a personal greeting to a specific phone number and only that person hears the message!
  - Script control - start an arexx script when an incoming call is detected or when the caller has hungup.

high quality modems from..£69.95

Choose from three high-quality branded modems - the top of the range, award winning PACE 56K, the new PACE 'Solo' 56K or the middle of the range Dynalink modem. Both come with a five year warranty. The PACE modem also ships with free lifetime technical support, UK caller ID (only modem available which supports this), a superb speakerphone, conferencing feature, volume slider, easy to understand LED's and non-technical, easy to read documentation. The PACE is currently the best 56K modem you can buy, virtually winning every single modem review in the PC, Internet and Mac press. All PACE 56K modems are now v90 shipping ready - the agreed standard for 56K connectivity. Why not treat yourself to the brand new PACE 'Solo'?

pace External 56K Modem



- Quality branded PACE 56 voice modem
- v90 ready (new 56K standard)
- 5 year warranty, life time free technical support
- 56000 bps DATA/FAX/VOICE modem - true v34+ Throughput to 115,200 (230,400 for internal) BPS
- Group 3, Class 1 send/receive FAX (14.4)
- V.80 (video conferencing) capable
- Call Discrimination
- UK Caller ID
- 10 LED's for full status monitoring
- Analogue Simultaneous voice and data (A.S.V.D.)
- Speakerphone for hands-free operation
- Mute button for secrecy
- Upgradable ROM chip
- On/Off switch to rear of unit
- Volume slider for speakerphone control
- Includes headphones/microphones - voice control
- Serial cable included (with 9 & 25pin connectors)

pace 'Solo' 56K Modem



The PACE 'Solo' 56K modem replaces your existing fax, answermachine and modem. It can work independently from your Amiga (so you can turn your computer off to receive messages, if you prefer). It contains the features listed to the left and includes:

- Full specification fax/voice answer machine with message replay, time stamping, remote retrieval of messages all operational in stand-alone mode.
- Stored messages accompanied by time, date and caller-id where applicable.
- On board memory stores any combination of approximately 30 minutes of speech or 30 pages of faxes.
- Group 3, Class 1 and Class 2 FAX (14.4)
- 1 expansion bay with 2 sockets for flash memory expansion modules.
- Memory expansion options upto 32Mbits.
- 5 backlit function keys, 11 function keys

PACE 'Solo' available late April - needs STFax Professional v3.3

Dynalink 33.6K External Voice/Fax/Data Modem	£69.95
Dynalink 56K External Voice/Fax/Data Modem	£89.95
PACE 56K External Voice/Fax/Data Modem	£129.95
PACE 'Solo' 56K External Voice/Fax/Data Modem	£189.95

modem pack options from..£79.95

Various money saving packs are available. These are all based on the Dynalink 56K modem. Packs based on the 33.6K or PACE 56K or PACE 'Solo' 56K modem available.

Code	Pack Contents	£ Prices
PK01	56K Modem & STFax	£ 99.95
PK02	56K Modem & NetConnect	£124.95
PK03	56K Modem & NetConnect & STFax	£134.95
PK04	56K Modem & NetConnect & Hypercom1 & STFax	£164.95
PK05	56K Modem & NetConnect & Hypercom3Z & STFax	£189.95

DEDUCT £20 for a Dynalink 33.6K Modem (instead of the Dynalink 56K)
ADD £40 for a PACE 56K Modem (instead of the Dynalink 56K)
ADD £100 for a PACE 'Solo' 56K Modem (instead of the Dynalink 56K)

- All packs come with one month free connection to Demon Internet and/or UK Online
- Choose between the CD or Floppy disk version of NetConnect with your modem pack
- Internal modem available - ISA card (not Zorro) suitable for the Boxer.

miscellaneous

	By Disk	By EMail
Miami - TCP/IP Stack for the Amiga	£28.00	£26.00
Voyager Next Generation	£22.00	£20.00
Microdot-II	£20.00	£18.00
AmIRC	£20.00	£18.00
AmFTP	£20.00	£18.00
AmTalk	£17.00	£15.00
X-Arc	£14.00	£12.00
AmTelnet + AmTerm Package Deal	£20.00	£18.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

high speed serial cards (new models!) from..£44.95

The *Hypercom* range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and fax transfers. Available for the Amiga 1200, A1200 Towers and Zorro-II/III based machines (Zorro version suitable for A1500/2/3/4000 or a A1200 tower).

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£39.95
Hypercom3	A1200T	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec parallel port	£79.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec parallel port	£74.95
Hypercom4	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports	£89.95

internet informer

Still unsure about connecting to the Internet? Confused by all the acronyms such as 'ISDN'? Confused about the costs? Wondering whether your Amiga can access the Internet? No need to worry any longer - we have released issue 2 of our 'Internet Informer' for Amiga users. A leaflet that offers you all the information you require in order to get your Amiga onto the Internet. Modem choices, software that is available, service providers for the Amiga, questions and answers. It also contains information about NetConnect and what we can do to get you onto the Internet. For your free copy, call us or write to us.

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Month In View

Nick Veitch tries to pretend he's been busy this month, attempting to give you the best Amiga mag money can buy.

Phew! It's been a busy month. Everyone has been working extra hard to bring you the best Amiga magazine we possibly can. By now you will have noticed that we have an excellent full program for you on this month's coverdisk – *PPaint 7*. This is the full version of what must be considered the best paint program on the Amiga, so I hope you are pleased with it. I was just glad that we were also able to fit it on to our floppy disk version of the magazine so everyone can enjoy it.

We will, of course, be explaining just how to get the most out of this excellent giveaway over the coming months, and we even have a special price upgrade offer so you can get your hands on the latest version for next to nothing! Don't miss our excellent demo of *Quake* on the CD either.

I have spent long hours sweating (almost literally) over what can only be described as the hottest A1200 add-on of the year so far, the blisteringly fast Blizzard PPC card. To find out why you probably need one, check out my review on page 54.

In the news this month we have details of new Amiga clones and a special report from the recent Amiga show in St.Louis – essential reading.

On the tutorials front, Simon Goodwin is continuing with his tips on how to get the best from your Amiga, and I have started a new tutorial, designed to teach you everything there is to know about graphics, which I hope you'll enjoy.

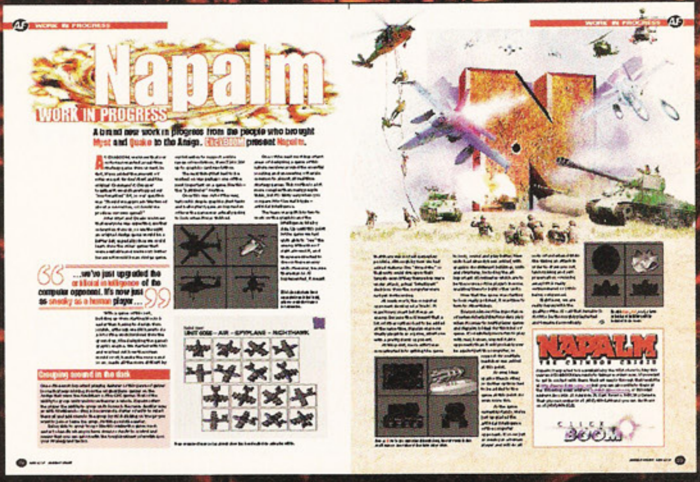
Just to prove I haven't written the whole mag myself this month, I should point out that Ben managed to wheedle exclusive details of the latest game from clickBoom, and it looks great! He also seems to have reviewed a huge tower from Eyetech, the essential comms software *STFax* and probably a few other things. I need a lie down now…



Nick Veitch
Editor



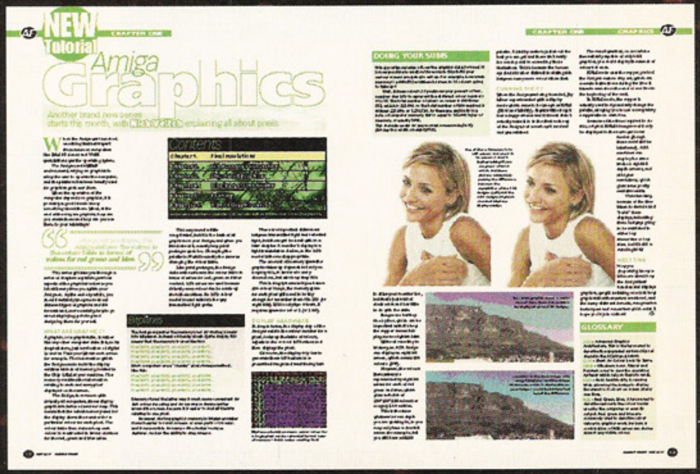
PPAINT 7 PAGE 16
The best paint package giveaway ever – *PPaint7*. Find out about all its great new features here, plus save money and upgrade to version 7.1.



W.I.P. NAPALM PAGE 32
clickBOOM's sensational-looking new project is revealed exclusively on page 32 – a fabulous *Command & Conquer*-style strategy game.



A1200 PPC PAGE 54
It has been billed as the ultimate A1200 accelerator. It has finally shipped a year late. Does it live up to expectations? Does it even work?

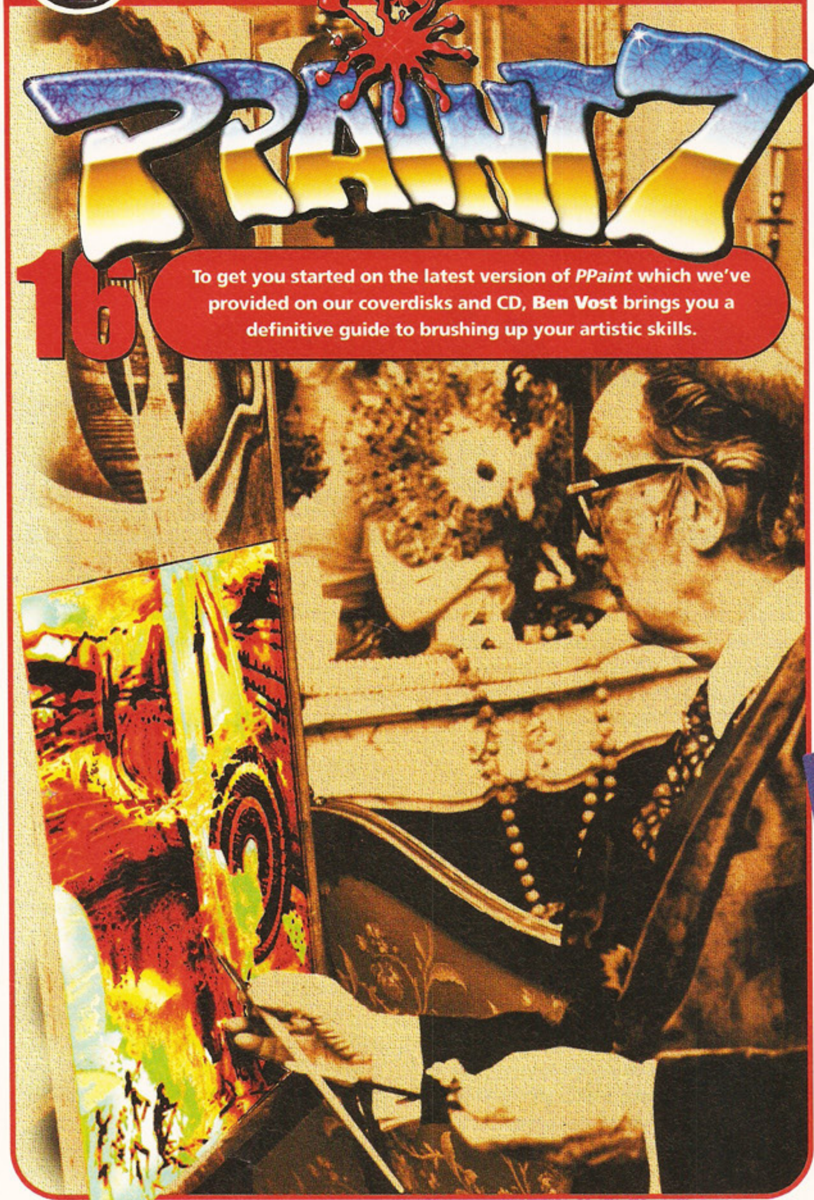


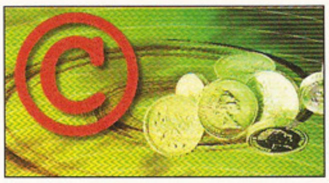
AMIGA GRAPHICS PAGE 78
A new tutorial starts this issue! Learn all there is to know about how graphics work on the Amiga – you'll be surprised how much you didn't know!

AMIGA FORMAT Contents

ISSUE 110 MAY 1998

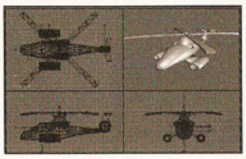
COVER STORY













Clockwise from above – Footy managers (on a beach), Flashback (in a jungle), choppers (in progress) and a wizard (in a pointy hat...)

CD-ROMS



COVERDISKS





SCREENPLAY

AMIGA News FORMAT

WHAT'S UP?

phase 5 news
New PowerPC development announced.

Pirates ahoy!
clickBOOM capture software pirates.

Budget Siamese
New offer from Siamese Systems.

Third Amiga clone announced!

After *Amiga Format* printed what we knew about rumours of an Amiga clone coming from phase 5, we now have news concerning the reality of this mystery machine.

In addition to continuing work on the CyberVisionPPC and the BVisionPPC graphics cards, phase 5 Digital Products have started a new development project for a PowerPC-based computer system.

Called the pre\box, it will use a licensed Amiga OS 3.1 and an advanced version of the PowerUP system software to give compatibility on the Amiga OS/Workbench 3.1 level under CyberGraphX V3. Wolf Dietrich said:

> It is an important step for revitalising the Amiga, encouraging developers and rebuilding a strong market.

"The license agreement we have signed with Amiga International allows us to start development of this new machine, which has been in conceptual design for several months now.

"It is an important step for revitalising the Amiga, encouraging developers and rebuilding a strong market."

Dietrich pointed out that the key for the survival of the Amiga market was the availability of outstanding new stand-alone hardware products as soon as possible, a goal they want to achieve with the pre\box design, saying:

"We need an expanding market in the very near future or the battle may be lost for the Amiga computer system."



A cheerful Wolf Dietrich reveals his masterplan for 1998.

The new pre\box machines will be priced for the medium to upper end of the PC or personal workstation market, but are designed to provide stunning performance. All will come as multi-processing systems with at least four PowerPC CPUs installed. phase 5 claim that this will allow them to provide very high computing power with an outstanding price/performance ratio.

"Multi-processing has arguably been the most important goal for phase 5 digital products in the past 18 months.

"It is how alternative technology can offer advantages and superiority over mainstream products in the PC market. It is a real challenge to build new stand-alone hardware products which can compete with mainstream PCs – especially when there's a feeling that PC systems are regularly sold at dumping prices, and a PC system you buy today may be outdated and nearly worthless in less than a year."

POWERPC

phase 5 do not plan to build single-CPU systems which would have to compete at a similar performance level with Intel-based systems. Instead, they aim to fully utilise the opportunities of the move to the PowerPC.

"Developers who jump on the PowerUP bandwagon today can get their products ready for multiprocessing quite easily. Therefore it will be possible to take two giant steps, from a single-CPU, 68K system to a Multi-CPU, PowerPC system, within a year, quite a leap for the Amiga market and one many thought impossible."

The pre\box system is designed for an ATX-type motherboard with the four PowerPC processors located on a separate CPU card. These will be equipped with inline or backside caches, depending on the type of PPC used. As the PowerUP system software features a software-controlled cache coherency, the pre\box can be equipped with CPUs which do not offer hardware support for multiprocessing like the PPC603e or the PPC750 (G3).

GRAPHICS

The pre\box system will also have an integrated 3D graphics subsystem, connected via a 66MHz PCI 2.1 bus with a peak performance of 264Mb/s and 8Mb of graphics RAM. This should provide a powerful enough standard as the minimum set-up for software designers to rely on.

On the same 66 MHz PCI bus there will be a special slot for a Voodoo2-based 3D accelerator card, directly coupled to the built-in graphics chip.

There will also be an integrated Ultra-Wide SCSI-II controller and a 100Mbit ethernet controller on the mainboard. This will allow the use of powerful UW-SCSI devices and provide fast network connectivity, a feature which will also support the distributed multi-processing concepts of phase 5. A 66MHz PCI bus with three standard PCI slots will be standard and 33MHz PCI boards will be accepted.

With the PCI bus integrated, new hardware products for the pre\box systems should be easy to develop as developers can use standard PCI products and adapt them for pre\box systems simply by writing the software for them. It has not yet been decided if there will be a socket for an optional 68K CPU left on the board:

"In this next-generation product, the obvious solution for using 68K software will be emulation. We are always encouraging Amiga developers to support the new MP software technologies and guidelines which we introduced with our PowerUP System Software, and those who follow these recommendations will be able to provide applications that utilize the vast power of our upcoming pre\box system right away."

The pre\box will also offer fast

serial and parallel interfaces, a USB bus and an EIDE interface for use with inexpensive CD-ROM drives or additional cheap hard drives.

The pre\box is set for release in winter 1998. The prices have already been determined, based on the current pricings for PowerPCs:

pre\box 604/800 (4x 604E-200MHz)
£1495 / 3995DM / US$1995
pre\box 604/1000 (4x 604R-250MHz)
£1895 / 4995DM / US$2495
pre\box 604/1200 (4x 604R-300MHz)
£2595 / 6995DM / US$3395
pre\box 750/1200 (4x 750-300MHz)
£3395 / 8995DM / US$4495

These prices are for pre\box systems in an ATX minitower with a mouse and keyboard, Amiga OS 3.1 and the PowerUP System Software. However, they do not include memory, hard drive and CD-ROM.

UPGRADE OFFERS

In order to support and encourage customers of PowerUP boards for existing Amigas, phase 5 will offer substantial discounts on pre\box systems to owners of PowerUP boards.

"We want to provide security for the investments of users today. Amiga users and developers need to see a fast-growing base of PowerPC systems in order to support the progress of developments.

"We want to encourage the users to invest in PowerPC technology now."

Owners of PowerUP boards who want to take advantage of the discounts on a pre\box system will not have to return their PowerUP boards in order to receive this discount.

They can continue to use their PowerUP Amiga as a stand-alone system or even use it from the pre\box via a provided link system which can use the networked multiprocessing feature of the PowerUP System Software.

"We want to help the Amiga market with these efforts, including supporting existing developers, and encouraging them and new or deserting developers to develop for PowerUP.

"Recent releases of PowerUP-compatible software, produced within just a few weeks by their developers, show how easily and efficiently existing Amiga software can be ported to support the new processor.

"All users can support these efforts, too, by contacting their favourite Software vendors and requesting PowerUP versions of their software."

More details can be found on the phase 5 website at http://www.phase5.de, or by calling on: 0049 6171 583785.

AMIGA OS 3.1 license signed

In a related story, phase 5 digital products will be able to use Amiga OS 3.1 in their future products after signing a license agreement with Amiga International.

"We are glad to see that with phase 5 digital products another important developer and manufacturer in the Amiga market shows his commitment towards the Amiga OS 3.1", said Petro Tyschtschenko of Amiga International. "As phase 5 has led the development of PowerPC products for the Amiga, this is an important agreement which will give a significant momentum to the future development of Amiga and Amiga-compatible systems, an expectation which is also supported by the cooperation of the different licensees of our Amiga technology."

Wolf Dietrich of phase 5 Digital Products had this to say: *"We are very glad that we have been able to negotiate an agreement which allows us to put significant efforts into our new project, and we appreciate the support of Amiga International and especially Petro Tyschtschenko for our project. This partnership shows the commitment to the Amiga and is an important signal for the future of the system."*



Petro, after signing another license agreement, yesterday.

Election time

The Steering Committees of the Jay Miner Society (JMS) and the Industry Council of the Open Amiga (ICOA) announced this month that the JMS has been appointed to hold elections for the position of User Representative on the next Steering Committee of the ICOA, which will take over in mid-April.

The ICOA is a non-profit organisation which develops and promotes standards and provides support for Amiga developers. It has been chosen by Amiga Inc. to provide the official developer support program for the Amiga in the future.

The position of User Representative is being created to help the ICOA in making decisions that benefit and satisfy Amiga users in general, not just programmers and manufacturers. The JMS is a non-profit making international user group devoted to empowering Amiga users and fostering the spirit of the Amiga. It created the ICOA initiative and launched it in May 1997.

The User Representative will have a full voting seat on the Steering Committee for a period of one year, alongside the four seats for those elected by ICOA members, and a permanent, non-voting, veto seat occupied by an Amiga Inc. representative.

This position, combining the roles of consumer advocate, opinion-gatherer, strategist and community liaison, will require a serious commitment of time and effort. The JMS and other user organisations will provide support for this. The Committee will have face-to-face meetings roughly every three months and will also attend selected Amiga shows. Expenses incurred by the User Representative in attending these events will be paid for by the ICOA.

By the time you read this, nominations will already have been taken and voting done, but we will be printing the winner in our next issue. You can find the ICOA website at: http://www.amiganet.org/icoa/ and the JMS website at http://www.jms.org.

THE WORLD OF AMIGA

Don't forget that there's only a month to go until the World of Amiga show at the Hammersmith Novotel. If you're still undecided, look at what's going to be on show there this year:

- **Your first chance to see clickBOOM's impressive new game, *Napalm*, exclusively covered in this issue of *Amiga Format*. You'll be able to play the game and you might even be able to buy it!**
- **Power Computing will have their A5000 on display and available to buy for the first time. They'll also have a new range of scandoublers and add-ons for the Power tower.**
- **There just might be a new version of Directory Opus available from the Wizard Developments stand.**
- **Active Technologies will have the Pace modems on show and available to buy, along with their excellent *STFax* software (reviewed this issue, page 64).**
- **Don't worry about the FA Cup. As mentioned before, this will be broadcast on a huge screen in a side room at the show at the normal time.**
- **New product launches from Epic, Weird Science, Blittersoft and more!**

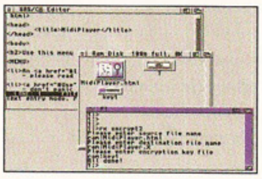
If all this has whetted your appetite sufficiently, you'll want to know that the World of Amiga show will take place at the Hammersmith Novotel in London on May 16th and 17th. The hotline is (01369) 708029 and the ticket price is £7.50 for adults and £5.50 for kids.

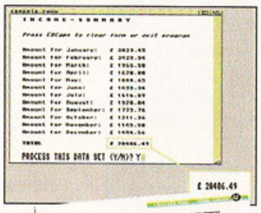
Continued overleaf ➡

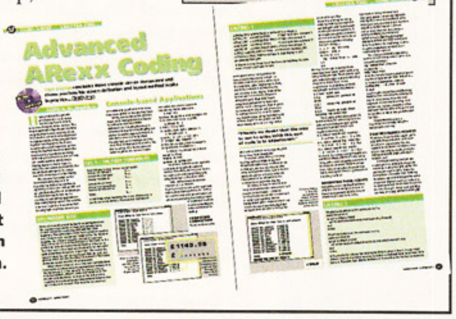
ARexx book offer

AF Special Offer!

If you want to continue following Paul Overaa's ARexx tutorials, you will be pleased to know that Wizard are offering *AF* readers an exclusive £5 discount on his 290 page book and tutorial disk. It will now be available for £18.99 (usually £23.99) from Wizard Developments, PO Box 490, Dartford, Kent, England, DA1 2UH or by calling +44 (0)181 3031800 (overseas readers add £5 for p&p).







Our ARexx tutorial may have finished but you can still get expert help from Paul Overaa.

Holding the pace

PACE Consumer Electronics are launching their new Solo modem on the 15th of April. Replacing your fax machine, answerphone and existing modem it will receive fax and voice messages and store them independently of your Amiga.

The modem will store any combination of 30 minutes of voice messages or 30 pages of faxes and can automatically switch between incoming fax and voice calls. It also has two expansion sockets which will allow up to 32Mbits of memory access, increasing voice and fax storage – ideal for a holidaying small business owner.

By combining the modem with *STFax Professional v3.3*, you can transfer the fax/voice messages to your Amiga, delete them from the modem and update your greeting message. The PACE Solo can also be used in conjunction with your Amiga to enable more advanced voice scripting features as supported by the current PACE 56K modem. For example, UK Caller ID allows you to monitor incoming calls, so you could be conveniently "out" when the mother-in-law calls or "in" when friends call.



The new PACE modem – all of the new features that you could need.

The PACE Solo modem will be available from Active Technologies on (01325) 460116 for £199.95 and will also include the full version of *STFax Professional v3.3*.

Talking heads

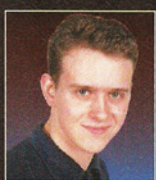
What have the *Amiga Format* staff been doing this month?



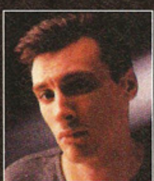
My favourite film this month is *Old Bones of the River* which has just been re-released on video for £5.99. A bargain. But I have been too busy playing with the Blizzard PPC and Mustek scanner to watch it so far. Life is hard.



March is always a busy month for me as I try to see as many of the Oscar nominees as possible. *Wag the Dog* was robbed, but I was pleased to see that *As Good As It Gets* did so well. Other than that, Propellorheads and pizza.



Mark's been too poor to do anything interesting this month, spending all his time huddled round a candle for warmth and scavenging through dustbins for food. Any donations would be gratefully received. Thanks.



Andy's fave game has been *UFO* this month – well it took him long enough to write the tips! He's been listening to Johnny Cash and Jim Reeves and has been too busy ducking his girlfriend's right hooks to go to the cinema!



After having a nasty scare at the doctor's, who wrongly diagnosed appendicitis, Colin cheered himself up by buying stacks of records – including a rare *Aphrodite's Child* original vinyl, featuring Demis Roussos on vocals. Marvellous.



I have been too busy playing with my musical bits and bobs to do anything remotely interesting this month. *Audio Thunder* and *SoundFX* are my favourite bits of Amiga software at the moment. And black boxes with lights on.

Deskpop

Yamaha are launching a top of the range desktop multimedia speaker for the ultimate in Amiga sound. The YSTM100 features many of the designs which are used in professional recording studios and it is the first speaker with dedicated tweeters and woofers.

Jeremy Allen, Yamaha's UK Sales and Marketing Manager said:

"More sophisticated audio applications, particularly computer games, require a speaker with a high-quality tweeter to deliver the upper frequencies that they generate.

"The YSTM100 is the first desktop speaker system to meet this demand."

The speakers are the first on a computer to be constructed from wood so all the power generated is projected out to the listener. This provides 40W (RMS) of power, and with bass, treble and balance controls and the option to add a sub-woofer, the YSTM100 promises to offer unsurpassed sound quality for its size.

An YMERSION system will allow for a surround sound effect too.

The YSTM100 will retail for £119 and should be available this month.

Continued overleaf ➡

"Long live the Amiga and the nice and friendly Amiga people!"

Amiga Mice

Replacement Mice £4.95
MegaMouse Plus (3 Button)..£9.95

"Well worth a tenner of anyone's money, penny"
CU Amiga "Amiga Superstar" Feb 1998

New Black Mouse 400dpi £7.95
Trackball £25.00
Crystal Trackball £30.00



Ram Boards

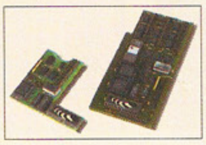
RAM CARDS A1200

A1200 with clock and 4Mb *(not upgradeable)* £40.00
A1200 with clock 33MHz FPU and 4Mb £50.00
A1200 with clock and 8Mb £55.00
A1200 with clock, 33MHz FPU and 8Mb £65.00
33MHz FPU inc. crystal £10.00

Controllers

Catweasel MKII for A1200 – allows you to connect High Density Disk Drive fits on to clock adapter leaving IDE interface free for our 4 way buffered interface £49.00
Catweasel for A4000 ....£49.00
Buddha IDE Controller for A1500/2000/4000 ....£49.00

Catweasel plus Buddha for A1500/2000/4000 ....£69.00
Oktagon 2008/4008 SCSI Controller £89.00
PCMCIA (Easy CD) Controller * plus external case and software £79.00



***Please ring for details**

New GI-Quatro Buffered Interface for A1200 '98 with full software

Buffered interface for A1200 with full IDEFIX'97 software allows you to connect 4 ATAPI devices to A1200 Comes with two 40 pin IDE cables and one 44 pin IDE cable £39.95

"Amiga Health Warning" Fear not with our Buffered Interface

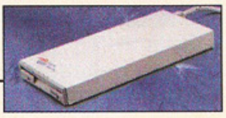
AlfaQuatro Interface

Specially made hardware and software. Includes IDEFix '97 software

Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller..........................£39.95

Joysticks & Joypads

Amiga Joysticks..........................£9.95
Amiga Joypads £9.95
CD 32 Joypad £14.00
Analogue Alfa Alien Joystick with analogue joystick adapter £14.95



Floppy Drives

External Floppy Drive for all Amigas £39.95
Internal Floppy Drive A500/500+ £25.00
Internal Floppy Drive A600/1200 ....£25.00
Internal Floppy Drive A1500/2000 (DF0 only) £30.00
Internal Floppy Drive for Tower user with face plate..........................£30.00
New interface: use a HDD drive as Catweasel drive and/or as an internal drive £15.00

Best pricing on CD ROM Drives & Hard Drives.

We can supply CD ROM solutions for ALL Amigas from A1500 to A4000. Four top AGA titles free: Nick Faldo's Championship Golf; Syndicate; Pinball Fantasies & The Chaos Engine.

All our External IDE CD ROM Drives have built in power supplies (they do not draw power from your Amiga)

GI-Quatro buffered interface allows you to connect 2.5" or 3.5" drives with full registered version software (not a demo)

All CD ROM drives have play CD facility.

Limited quantity of external 2 speed SCSI CD-ROM with squirrel only £79



	External A600/A1200	Internal A1500/A2000	Internal A4000	Bare mechanism
16 Speed CD ROM for	£120.00	£95.00	£89.00	£49.00
24 Speed CD ROM for	£130.00	£105.00	£99.00	£59.00

A1500/A2000 supplied with IDE controller & software. A4000 supplied with AlfaQuatro interface & Full IDEFIX software.
Bare CD-ROM suitable for internal fitting requires IDE interface and software.

New Products

External Scandoubler with TV tuner

"A brilliant piece of equipment" 9/3/98 Nicholas Lamburn

"Want a VGA or Multiscan monitor, but want to watch tv on it too? Ben Vost gets best of both worlds with this rather oddly named box" AF Jan 1998

TV Amazing external Scandoubler with TV tuner, SVHS input, composite input and VGA input/output with infrared controller..........................£89.00

Accelerators for Amiga A1500/2000

2030 Turbo - 25MHz with SCSI option .... from £99.00
2030 Turbo - 50MHz with SCSI option £159.00
SCSI Hard Drive 4.3Gig ....£259.00 Best Price
SCSI Hard Drive 2.1Gig £189.00
Requires SCSI Controller
Oktagon SCSI Controller plus 2.1Gig £250.00

New 16 Speed PCMCIA CD ROM Drives for A1200/A600 ....£130.00

IDE Hard Drives for A1500/2000

Hard Drives plus Buddha IDE Controller 2.1 Gig ....£179.00 *Starbuy*
Hard Drives plus Buddha IDE Controller 4.3 Gig..........................£239.00 * *Starbuy*

IDE 2.5" Hard Drives for A600/1200

All 2.5" Hard drives come formatted and installed with Workbench, including IDE, cable, screws, software and instructions. *(please check for availability)*

170Mb..........................£59.00 *Starbuy*
340Mb..........................£79.00 *Starbuy*
810Mb..........................£129.00 *Starbuy*
1.0Gig..........................£139.00 *Starbuy*

Star Buy

IDE 3.5" Hard Drives for A1200/4000

1.6Gig	£120.00	3.8Gig	£189.00
2.1Gig	£115.00	4.3Gig	£169.00
3.2Gig	£139.00	*5.0Gig	£219.99

We will partition and format Hard drives and install Workbench. *5.0Gig will fit and work on Amiga Computers contrary to warnings given

(Amiga Format Gold Award winner August 1997)
(Amiga Format Gold Award for 3.8Gig January 1998)

Memory

4Mb Simms	£10.00	8Mb Simms	£20.00
16Mb Simms	£40.00	32Mb Simms	£70.00

Zip Rams *(suitable for A3000, Alfapower, At-Bus 2008 & Oktagons)* every 2Mb £40.00

Accelerator for A1200

1230-40MHz & FPU with 8Mb plus MMU £99.00
1240-25MHz & FPU with 8Mb..........................£130.00
1240-40MHz & FPU with 8Mb..........................£200.00
1260-66MHz & FPU with 8Mb £340.00
includes MMU & FPU

Miscellaneous Products

Philips monitor to Amiga cable..........................£6.00
Printer cable..........................£5.00
PC Keyboard Adapter £19.95
SCSI case with PSU £49.00
Boot selector switch for A500/2000 ....£10.00
44pin 3 connector cable..........................£8.00
44pin 2 connector cable £5.00
40pin 3 connector cable 80cm for CD-ROM & 3.5" drive..........................£5.00
AlfaQuatro 3x40pin Interface & IDE cables..........................£20.00
DD floppy disks (50) with disk boxes *including multicoloured disk labels* £13.00
DD floppy disks (100) with disk boxes *including multicoloured disk labels* £25.00
3.5" Hard Drive Kit for A600/1200 *+ Install software* £15.00
Diskbox to hold 10 discs £1.00
Animal Jungle design and Dinosaur design £2.00
2 in 1 Scanner/Mouse Pad *Can be used as a memo pad* £3.00
VGA Adaptor £10.00
Amiga Power Supply 4.5 amp £15.00
Plain Wristrest £2.00
GI-Quatro buffered interface without cables or software £25.00
A500+ 1Mb ram card..........................£20.00
A600+ 1Mb ram card..........................£20.00
ROM Chip for A500 or A600 V2.05 ....£19.00

CDROM Drives (Bare) For internal fitting.
Requires interface and software
IDE 8speed £39.00
IDE 16speed £49.00
IDE 24speed £59.00

Chaos pack AGA: 4 great games **(on disks)** (The Chaos Engine, Syndicate, Pinball Fantasies, and Nick Faldos Golf). All Amiga Format Gold winners £5.00

Audio Cables for CD ROM's
Stereo jack (3.5mm) plug to 2 x RCA phono plugs 1.2 meter long..........................£5.00
Audio mixer 2 x RCA phono plugs to 2 x RCA phono plugs/sockets 1.8 meter long..........................£6.00
2x RCA phono plugs to 2x RCA phono plugs 1.2 meter long..........................£5.00

Multipass OCR Software
suitable for all scanners and direct scanning support for hand scanners by Migraph, Golden Image, AlfaData and Power..........................£10.00
Highpower power box PSU..........................£49.00
Printer Enhancement Software £39.00

All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00, £8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome.

Golden Image accepts Mastercard, Visa, Switch, Cheques & Postal Orders. E&OE. Prices subject to change without notice. Goods subject to availability. Specifications subject to change without notice.

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Our standard terms and conditions apply – available on request. We do not supply on a trial basis.

AF Net Corner

Despite their tabloid image, Internet users are not all lads looking at porn and football sites, a new survey by Prestel On-line has revealed.

Despite 73 per cent of Internet users being male, their online habits favoured surfing educational sites rather than pages of sport, games, music and humour. The survey also revealed that 80 per cent of those males who read online newspapers chose broadsheets like The Times and 95 per cent thought parents should supervise children's surfing habits.

Michael Holland, managing director of Prestel On-line said, "The online community has been much maligned as the preserve of immature, laddish, carefree males. This survey confirms that the web is populated by predominantly young men but those with a more sensible approach to using the information it makes available. It seems that Internet users are the victims of unreasonable stereotyping from their offline compatriots."

The survey questioned 100 customers during February, finding over half of the users to be under 30, equally split between those in full-time education and employment.

OOPS!

On the off chance that you were under the impression that Sadeness Software actually published the excellent *Myst*, an impression we might have given when we reviewed the game in issue *AF108*, then fret no more.

As should be obvious to anyone, what we meant to say was that clickBOOM themselves were the developers and their parent company PXL Computers were the publishers.

While you can buy *Myst* from Sadeness (they supplied us with our copy), the official distributor in this country is actually Apess Distribution, who are available on (0171) 235 4851.



GTI CHARTS

TOP TWENTY AMIGA CD-ROMS

1	(1)	Aminet 22
2	(-)	Amiga Format CD 23
3	(-)	Scala MM 300
4	(2)	Aminet Set 5
5	(5)	Amiga forever
6	(6)	Aminet 21
7	(19)	Aminet Set 3
8	(-)	Amiga CD 2/98
9	(7)	Personal Paint 7.1
10	(-)	Amiga Format CD 22
11	(11)	Tele-Info vol 2
12	(-)	17 Bit level 6
13	(-)	Magic WB Enhancer
14	(24)	Kara Collection
15	(-)	Deluxe Paint 5
16	(-)	Ultimate Blitz Basic
17	(23)	Aminet Set 2
18	(-)	Aminet Set 1
19	(13)	Personal Suite
20	(-)	Anime Babes Special

GTI are Europe's largest distributor of Amiga CD-ROM titles.

Pirates clobbered by clickBOOM!

In a piece of news that can only help the Amiga community, clickBOOM's parent company PXL Computers have recently told us of their undercover operation to expose some of the worst pirates in the Amiga market and bring them to justice.

These pirates have been named as Andreas Schaefer from Germany and Brad Barnett, who is from Canada.

Having tracked the evil miscreants for some time, clickBOOM pounced and the pirates were fined or forced to settle out of court. The operation was a large one, involving honest Amiga owners from all over the world posing as 'customers' for the pair.

clickBOOM logged all access to their website and ISPs got involved in tracking down electronic traffic generated by the pirates and providing evidence to prove that it was them.

The two pirates had a wide variety of new and recent software on offer, including, but not limited to, clickBOOM's games, and both promised to have clickBOOM's *Quake* as soon as it was available.

What's even more shocking is that one of the two pirates actually worked for a well-known Amiga outlet, undercutting the store's margins and possibly hurting the Amiga market in order to make some extra money for himself.

Alexander Petrovic, the producer for clickBOOM, told us that he was very happy with the result: ***"For many years piracy was killing development on the Amiga. Even now, when every piece of software is so precious, pirates won't stop. Instead of running away, PXL Computers decided to load the guns and go hunting.***

"We would like to thanks everyone who helped us in this first battle, especially our lawyers for their swift action."

In general, the piracy situation on the Amiga doesn't seem as bad as it once was thanks to pirates migrating to other platforms, but Greg Perry of GP Software, authors of the world-beating *Directory Opus Magellan*, reckons that they have sold maybe one in ten of the copies in use around the world.

When told that these pirates also offered *Directory Opus* amongst their "warez" and asked to comment on this crackdown, he said, ***"Good news! We have tried to legally prosecute pirates here, but our local enforcement agencies just don't want to know if you aren't MicroSoft! I even got as far as the Federal Attorney General once and it still all came to nothing."***

So it seems that not only is piracy a problem, but policing it is too. Although things have changed somewhat since the days of the events depicted in Clifford Stoll's seminal computer classic *The Cuckoo's Egg*, not enough is being done, or can be done by local law enforcement. At least in Britain there is the Federation Against Software Theft (call 01753 527999, fax 01753 532100 or email fast@fast.org.)who are an extra-legal authority that investigate piracy of this sort. However, this doesn't really help software authors who are plagued by overseas villains selling pirated versions of their software.

Piracy is one of the easiest crimes to indulge in, even by accident or omission. If you have a friend who offers to "lend" you software, or even if you have Shareware that you haven't registered after months of constant use, you are indulging in piracy.



Make sure that you register that bit of Shareware or buy that commercial package which you find so handy and you'll be helping the Amiga market as well.

Budget Siamese

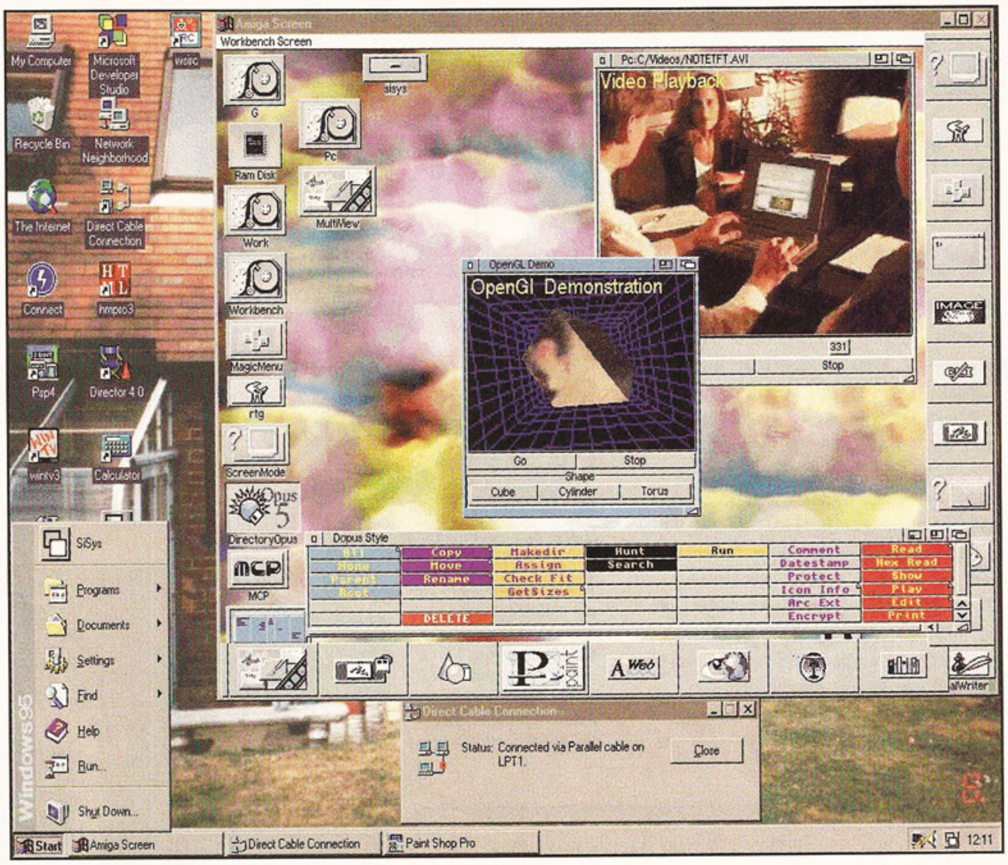
Due to requests from many potential customers who want to see what the Siamese system v2.5 can do before parting with their money, Siamese Systems have decided to launch their new Siamese Remote Amiga v2.1 package at an extremely reasonable price. It can be used as a full serial-based system in its own right, or evaluated and then part exchanged for the full Siamese V2.5 Pro package by paying the difference.

Siamese Remote Amiga v2.1 is based on the Siamese v2.5 software but without the TCP/IP (Internet /ethernet) capabilities, and uses a normal null modem serial cable (not supplied) for connection. The software supports serial speeds up to 115,200bps on a standard AGA Amiga serial connection.

This version of the Siamese system also supports CyberGraphX screen modes, but obviously won't be as quick when using 16bit graphics over a serial line as it is over an ethernet connection. This also applies to the full version of the software.

The main features of the Siamese Remote Amiga v2.1 CD-ROM are:

- Supports all serial speeds available to both the Amiga and PC. The standard maximum is 115200 bps.
- Supports third-party Amiga and PC high speed serial cards.
- Remote control Amiga from PC. Most RTG-friendly Amiga screens appear in a Window on Win95/NT4.



The Siamese System is now available in a special trial version at a great price!

- Single keyboard and mouse control for both Amiga and PC.
- Works on Intel and Alpha processors (Alpha needs FX32).
- PC drives are accessible from a standard AGA Amiga, with up to 13K per second.
- Supports SCSI networking to speed up file transfer (1Mb/sec) with suitable controllers on the PC and Amiga.
- Emulates CyberGraphX screen modes, but bitmaps will be transferred at serial speed.
- Can be part-exchanged for Siamese v2.5 Professional, (TCP/IP ethernet version £99.95).
- Special WinUAE setup files to transfer your WB3 to a WinUAE environment by using Sisys MountPC.
- Will create ideal Real Amiga and WinUAE Amiga solutions, giving the best of both worlds.
- Great for creating the Amiga floppy disk files for WinUAE.
- Works with the Amiga Forever package or PD downloaded version of UAE (not included on CD).
- The new CD has video footage to explain Siamese system v2.1, v2.5 and the new Siamese v4 PCI Amiga.
- Many utilities and PD programs that work over RTG and aid the integration are included on the CD.
- Available from Siamese Systems Ltd. or many dealers. See: http://www.siamese.co.uk/ordering.html for further details or phone or fax Siamese Systems on 01525 211558.

Diary

More shows for you globetrotters to visit:

- **MTT 98**, April 25th-26th, Trier, Germany. Details to follow.
- **World of Amiga Show 98**, May 16th-17th, Hammersmith, London. p.brameld@ukonline.co.uk
- **International Amiga 98**, May 29th-30th, Toronto, Canada. http://www.randomize.com/ia98.html
- **AmiWest**, July 11th-12th (Developer days 10th-14th July), Sacramento, CA, USA. http://www.sacc.org/amiwest/
- **BSE 98**, August 7th-9th, Diepenbeek, Belgium. http://bse.base.org
- **California Computer Expo**, August 20th-23rd, California, USA. Details to follow.
- **Live 98 – technology show**, 24th-27th September 1998. Contact Blenheim Exhibitions (0181) 742 2828.

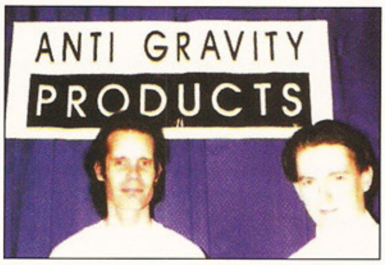
Siamese v2.5 to Siamese v4 PCI Amiga Upgrade offer

If you are one of the many people who have shown interest in the Siamese v4 PCI Amiga and have asked Siamese Systems if the deposit scheme could be made part of the Siamese v2.5 package you'll be pleased to know that they have decided to offer the following special deal to people who want to pre-order the Siamese v4 directly from them. If you order Siamese v2.5 for £99.95 plus P&P direct from Siamese Systems Ltd. before April 30th, they will put £50.00 towards your deposit on the Siamese v4 system. With the £50.00 discount this will mean that the Siamese v2.5 will actually work out free of charge.

Continued overleaf ➡

Amiga98 Show Report





Paul Nolan reports exclusively for *AF* from the Gateway Amiga show in St. Louis. This is North America's largest Amiga only show, a three day event in the Harley Hotel.

Sadly, I missed my 6am flight by 5 minutes and so I wasn't able to attend any seminars on the Friday. However, what was scheduled looked interesting, and a good direction to continue in, along the lines of the DevCons of old.

Friday evening was setup/Amiga Inc. party time. I wanted to see what the damage was to my equipment, so I resisted repeated attempts to get me to boogie on down and proceeded to set up my stand.

> *The show opened on Saturday morning at 11am, with a very satisfying queue at the entrance.*

This year, the bright yellow balloons had smiley faces with shades on, as in "the future's so bright, you gotta wear shades". To celebrate this, licensed Blues Brothers were hired to do their thang, which luckily for me provided enough distraction for me to unpack my Amiga from my suitcase without getting too many funny comments about having Socks Inside.

Two hours sleep and several oversize flaming B52 drinks at the bar contributed to me not having a whole lot else to remember about Friday. Oh, I also seem to recall some crazy Amiga guy called Joe Torre receiving a pair of white and red checked shoes from NCAUG Vice-Chairman Bill Borsari that went "BOING!" whenever the he made a step. No, that's just plain silly, I must have been delusional for sure.

The show opened on Saturday morning at 11am, with a very satisfying queue at the entrance. Exhibitor's highlights included National Amiga doing a roaring trade and showing the new Amiga4000T case from QuikPak, which looked very smart indeed – I want one!

Amiga.Org hosted IRC sessions throughout the show – be sure to check out their great website at http://www.amiga.org.

Asimware demoed the new *MasterISO 2*, the tool to use for cutting all types of CDs on the Amiga. And where would the show be without the Gateway Amiga club, who must have been incredibly amused when Gateway announced the acquisition of the Amiga shortly after their successful Gateway97 show last year.

Legacy Maker Inc. showed their unique Amiga video magazine and Catalyzer *ImageFX* tutorial videos. Newtek were demoing their still awesome *Toaster* and *Flyer* combo.

They said that the Amigas current







(Clockwise from above). Amiga.org, Bob Scharp and his wife Diane and the Blues Brothers all attended the show (or organised it!).



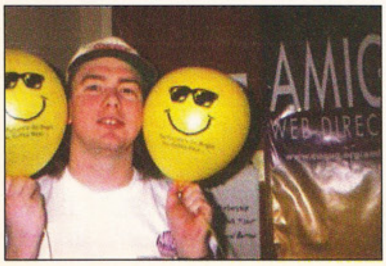
The Anti Gravity boys (top) and Rick and Tammy from Asimware (above) posed for their pictures.





CUCUG (Amiga Web Directory) were there and even gave Petro a t-shirt (below). Eric Schwartz and his dad had a stand too (bottom).



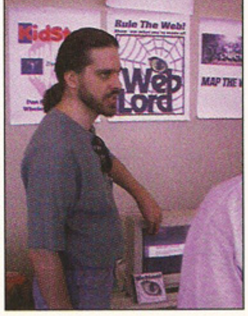




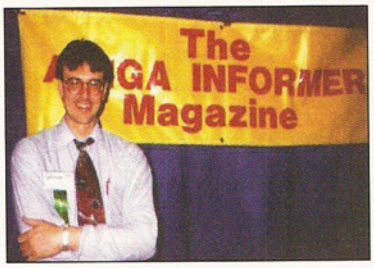




Joe Torre received some Boing! shoes from the guys at NCAUG that even went "boing!" every time he took a step, thanks to their little speakers.





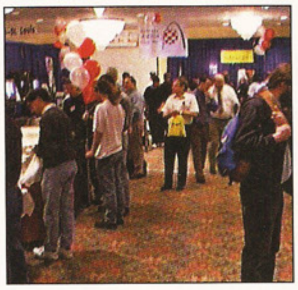






Jeff said, "I have nothing to say, but it's from the heart."









At the top, Don Hicks of Amazing and Fletcher Haug of Amiga Informer were there to sell their mags.

hardware limitations were the only reason the Amiga version on *Lightwave* was on hold, but I suspect that even with a PowerUP port, they have already priced themselves out of the Amiga market with version 5.5.

Holger Kruse of NordicGlobal was a staunch supporter of the show, not only showing off Miami on his stand, but teaching TCP/IP classes on the Friday.

Nova Sector demoed **Tornado3D** on one of their high-end clones and Randomize were selling their Amiga Wares, officially licensed Amiga clothing. They were also promoting the next big Amiga show on this side of the pond, the International Amiga Show, held in Toronto on May 29th and 30th.

SoftLogic were showing the impressive *PageStream 3.3* and Wonder Computers were just outside the main hall, selling clickBoom's *Myst* amongst other things. Y/C Plus were selling all manner of video goodies, including a new line of video monitors. Apologies to all the hardworking companies I have not had space to write about.

GRAPHIC DISPLAYS

Graphics enthusiasts were in for a treat at the show. NovaDesign unveiled their eagerly awaited *ImageFX3* and had several seminars on it and *Aladdin 4D* throughout the show. NovaDesign deserve a well earned pat on the back for keeping the professional graphics market alive in these hard times.

I myself debuted a special preview of *Photogenics Ng*, which went down a storm. Features demoed included the new user interface, the rewritten multi-threaded architecture, unsurpassed natural media tools that allow artwork to be created by even the most artistically challenged, multiple layers and very cool paint on pyrotechnics.

Saturday night was *Photogenics Ng* seminar, banquet and speech time. Being last in the queue for the banquet, I ended up eating at the bar, which just shows how the amount of interest surpassed that which was expected.

> **"In retrospect, he is glad for all the setbacks as it has allowed him to conceive a long-term business plan..."**

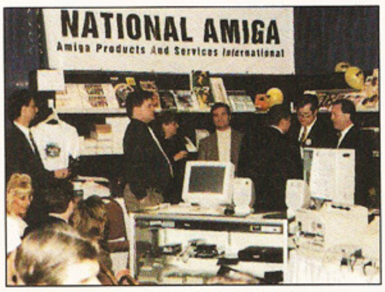
Petro's speech was quite... interesting. As usual, he had nothing to say worth writing about, but the way it was said was cause for concern. It seemed to me that there was some amount of personal politics going on between him and Amiga Inc.

After Petro came an anti-Microsoft activist who was amusing for about 20 minutes, but wore thin after an hour.

National Amiga, Nova Design, Wonder Computers and awards galore meant the show went with a swing...











MAJOR ANNOUNCEMENTS?

Jeff Schindler was the final speaker. Unsurprisingly, there were no "big announcements". What he did say was well spoken and realistic though. To paraphrase: ***"The Amiga is in the Valley of death, and won't be out for some time. So if there is something else you can do in the mean time to survive, go do it, but always keep the Amiga in your heart, and if you decide to buy a PC, make sure you get a Siamese System to go with it."***

Although I could have imagined that last bit. Amiga Inc. have been plagued by setbacks. Firstly, the manager Jeff reported to, Rick Snyder, left Gateway2000 for personal reasons.

This meant a change in command for the worse, with the result that Amiga Inc. was struggling to justify its existence. Twelve business plans later, seemingly little progress has been made from when Gateway first acquired the Amiga, but Jeff is sure he will succeed.

In retrospect, he is glad for all the setbacks as it has allowed him to conceive a long term business plan he is very happy with.

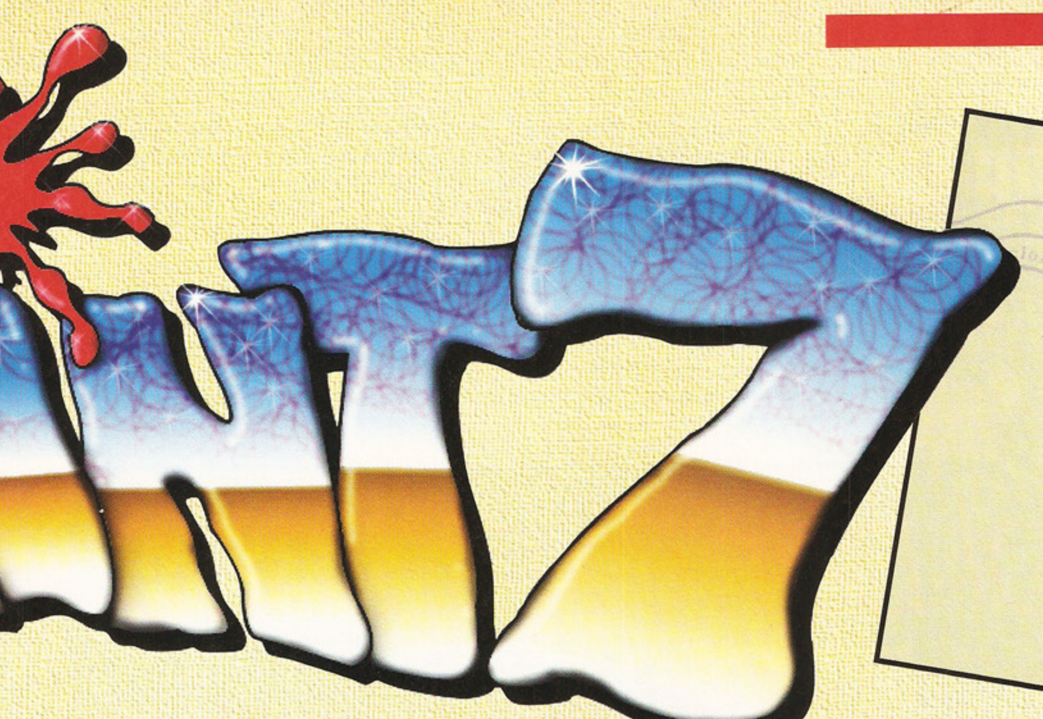
In conclusion, this year's show was a great success and has hopefully instilled a lot of confidence in both exhibitors and attendees alike. My thanks to Bob Scharp, his wife Diane, and everybody else who helped to make this year's show such a good one.

Special thanks to Kevin Hisel of CUCUG and Markus Nerding of Haage & Partner for letting us have their photos at such short notice!

Top Tips

- Keyboard shortcuts for the tools in *PPaint* are very useful to learn so that you can get your pictures done faster. Try m for Magnify, alt-b to use the current brush's palette or shift-k to clear the screen.
- You can load images simply by dragging them onto the *PPaint* appicon. You can also swiftly get to the *PPaint* screen by double clicking on it.







Top Tips

- You can have up to nine brushes on the go at once in *PPaint*. To switch between them, just hit the numeric pad keys.
- If you are using a graphics card and you don't like the thickness of the borders to *PPaint* requestors, you can set them yourself with the THICKX and THICKY keywords in the "Startup_1.set" file.

What do you want? *PPAINT*! When do you want it? NOW! Ben Vost gives in to your basest desires and explains the ins and outs of the Amiga's best bitmap paint program.

This just has to be one of the best art-related giveaways *Amiga Format* has ever done. *Personal Paint 7* is a very serious bit of software and yet it's so simple to use. Those of you paying attention to Nick Veitch's recent *PPaint* tutorial will know that there's a lot of power hidden under the bonnet, and yet it's so simple to use.

There are image processing functions, animations, ARexx scripts, excellent font handling, and yet (I think you're getting the gist now), it's just soooo simple.

Over the next few pages we'll be going over some of the many features of *PPaint 7*, explaining some of the more obscure ones in a bit more detail and giving you some handy tips to let you get the most out of this great program.

> "One of the features that first set PPaint apart from its main competitor was the inclusion of convolution operations..."

We'll start off by talking about the general interface of *PPaint*. I'm sure you're probably all familiar with it from our coverdisk last year, but there are some touches that I'm sure even you don't know about.

Continued overleaf ➡





These two pictures show off *PPaint*'s palette merging skills and rub-through/image processing tools.

Firstly, all the tools get ranged down the left-hand side of the screen. These have keyboard shortcuts as shown in the diagram, familiar to owners of *DPaint*. If you want to change these, you can by attacking the appropriate UIText file in PPaint:PPaint_Prefs drawer.

The shortcuts are listed at the bottom of the file. However, the first thing I tend to do when I install a new version of *PPaint* is change some of the keyboard shortcuts and wording of the menus in my own copy.

To do this, make a copy of the "Startup_1.set" file in PPaint:PPaint_prefs. Then you can edit this file as you like.

Personally, although it may seem petty, I'm not in favour of the American spelling of the word "colour" as used throughout *PPaint*, so I set my text editor to replace every instance of "color" with the correct spelling for the UK. I also dislike *PPaint*'s default shortcuts for things like loading images, saving them and quitting, so I tend to edit these shortcuts too.

While it's good that they are all single key shortcuts by default, I still prefer to use standard shortcuts like RAmiga-O to load an image, RAmiga-S for Save and RAmiga-Q for quit.

Top Tips

- If you want to stop a lengthy operation, such as a full-screen filter, you can hit the space bar.
- If you are running short on RAM, make sure you use *PPaint*'s memory requestor (shortcut shift-/) to flush unused buffers.
- If you want to see a picture that is bigger than your screen size, you can always hit shift-s.

The tool bar explained



The '1' represents the current custom brush you are using. *PPaint* allows you to have up to nine, some of which can be animbrushes. Shortcut: numpad keys.

The other symbols in this section of the toolbar represent different default brushes in different sizes. You can resize them with the + & - keys.

Dotted Freehand – default shortcut: s
This tool allows you to draw freehand, but doesn't attempt to keep up with mouse movements.

Continuous freehand – default shortcut: d/shift d
This tool will draw a continuous freehand line. If you click on the lower half of the button it will be filled.

Curve – default shortcut: q
This one lets you make a smooth curve by moving four control points along the length of its line.

Straight Line – default shortcut: v
Holding down the shift key when using this tool forces it to draw only horizontal or vertical lines.

Circle – default shortcut: c/shift c
This will make a proper circle from the centre to the outside edge (rather than from the top left).

Rectangle – default shortcut: r/shift r
This simply draws a rectangle. The second shortcut listed (as for all drawing tools) is for filled.

Ellipse – default shortcut: e/shift e
This is a free circle tool. Like the other tools, holding down the shift key will fill the ellipse you make.

Polygon – default shortcut: w/shift w
Draws an n-sided polygon, like using the straight line tool. Hitting the space bar will finish the shape.

Airbrush – no default shortcut.
This 'sprays' the current brush in a random fashion. To switch to the default brush press '.'.

Fill – default shortcut: f
Fills an area on-screen. Be careful to make sure that the area is solid and doesn't have any gaps in it.

Text – default shortcut: t/shift t
This gives you a cursor that you can type on screen with. Make sure you check out the 'Text' menu.

Image Processing – default shortcut: n/shift n
The first press on 'n' will open the filter window, but presses of it thereafter will repeat the same filter.

Macros – no default shortcut.
Hitting the left mouse button on this gadget will either choose or repeat a macro.

Define brush – default shortcut: b
There are lots of different modes in selecting a brush. Continue to click on this tool to see them all.

Zoom – default shortcut: shift ,/shift .
This tool lets you zoom in and out of the magnified area using the left or right mouse buttons.

Magnify – default shortcut: m
This tool will let you to draw a box over the area of your picture that you want to see enlarged.

Clear – default shortcut: shift k
This command will clear your screen, depending on the stencil. Right mouse will clear anim frames.

Undo – default shortcut: u/shift u
Undoes or redoes the last command you did.

Grid colour – no default shortcut.
This allows you to select the colour for the magnify grid. To choose another colour, click in the palette.

Palette – default shortcut: p
You can also pick colours off the screen using ','.

You can choose your foreground palette colour by left-clicking on the colour you want, and your background colour by right clicking.



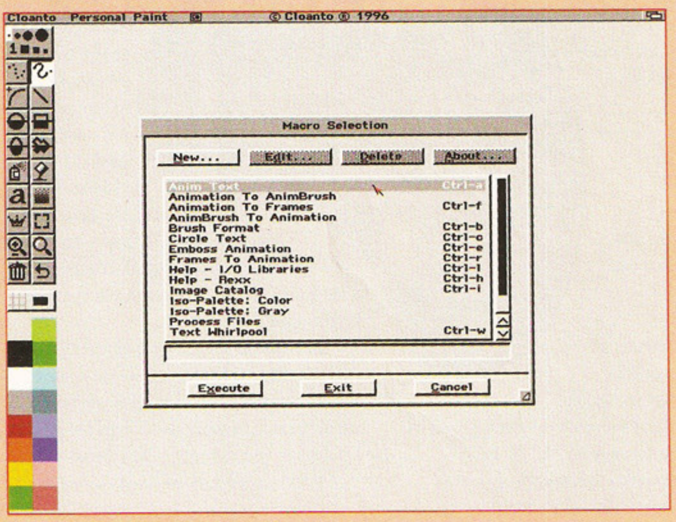
Using the right mouse on the custom brush will give you a list of the nine. Right clicking on the other brushes will allow you to resize them on-screen.

PPAINT ANIMATION

PPaint didn't have any animation features for quite a while, but in version 7 they were well-developed. Storyboarding and the ARexx scripts to help things along all come in handy, as does the facility to have animbrushes which has been added in this version. In fact, in conjunction with the excellent *Kara* CD (also from Cloanto, and there's a single font included with *PPaint* on our CD), you can run ARexx scripts to have animfonts galore flying across the screen in glorious technicolour.

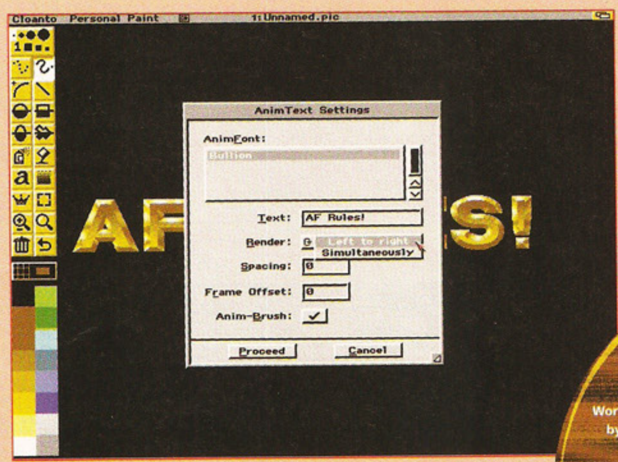
For those of you not in the know, AnimFonts are just that – animated fonts. They tend to be eight-colour animbrushes that can be quite tricky to use in, say, *DPaint*, but *Personal Paint*'s excellent ARexx script takes all the hassle out of using them for very quick and good-looking titling.

Here's an easy, step-by-step guide to using *PPaint* with animfonts:



1. Right mouse click on the crown button on the toolbar to bring up the choices of ARexx macros to run.

We are going to pick the "Anim text" script and you'll also see that you can call it up from your keyboard by simply hitting Ctrl-a.

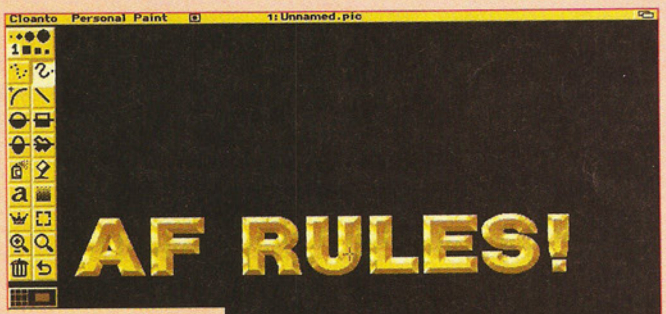


2. Choose the animfont you want to use. If the only one you have is the one supplied with this version of *PPaint*, you won't have much option, so pick "Bullion". Otherwise pick whichever you want to use.



3. There's a text field under the list of fonts in which you can type the text you want animated. This script doesn't have the facility to wrap text or put it over several lines, so make sure you are only doing the first part of your text, if it's a long line we're dealing with.

The render cycle gadget allows you to choose whether you want your letters to appear one after the other or all at once. With Bullion it's a good idea to have the letters appear one after the other, but with others it might be better to have them all appear at once. Spacing determines how far apart the letters are and frame offset determines the overlap between the letters being rendered. By default, for Bullion the overlap is ten frames out of twenty, but you can adjust this as you like.



4. Once your text has rendered and you have it as an animbrush, you can hit the capslock key to lay it down as an animation. Just press the left mouse button once and *PPaint* does the rest.

It's not just the menu wording you can change as you like. You also have full control over the text for gadgets, requestors and the like, and if you edit the file in the same drawer called "UIGraphics.pic" you can even change the look of the buttons in the tool bar for your very own *PPaint* look. Nice.

Enough of the techie-type stuff. I'm sure that an awful lot of you aren't particularly interested in the fact that you can edit *PPaint* to your heart's content. What you want to know about is how to use the package. Unlike programs such as *Photoshop* on other platforms, *PPaint* doesn't really need much in-depth explanation as most of its tools are very obvious. Most of the drawing tools are actually two buttons in one. You can click the top-left hand side to achieve one thing and the bottom-right for the other function – this is commonly an unfilled/filled draw operation.

The others also tend to have two functions by clicking either the left or right mouse button on them. These tend to be use/choose buttons where, for instance, you can click the left mouse button on the text tool (the lower case "a" in the toolbar), and by default you'll get the text cursor and use Topaz/8 in whatever colour you

Top Tips

• If you want to make a backdrop for your Workbench, you can always grab your WB's palette by going to the Color menu and picking "From Screen..." from the Palette submenu.

• If you don't like Cloanto's file requestor, you can always choose the ASL one (system standard), but to get the file options, you have to save your file. An options requestor will then appear.

Top Tips

• You can switch between the various grid settings in the magnify mode by clicking on the hash mark in the bottom right-hand corner of the magnify window. You can also zoom in and out using the shift-. and shift-, keys.

• If you turn the stencil on in *PPaint* then it will be saved along with any ILBM images that you save.

"Galleries" of images are dead easy thanks to *PPaint*'s simple-to-use Image Catalog ARexx macro.



Continued overleaf ➡

currently have chosen. Hit the right mouse button over the same tool and a font requestor comes up, letting you choose a different font instead. A little bit of experimentation will soon make using the tools almost second nature.

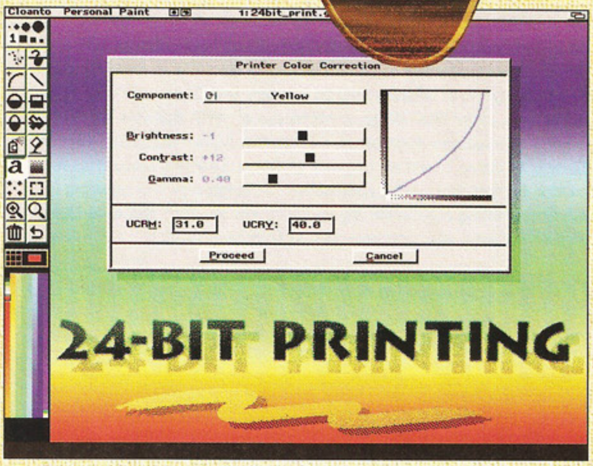
Some of *PPaint*'s features aren't included on the comprehensive tool bar. One of the most useful of which (and one unmatched by any other paint package I know of) is the "Less Colors…" function which you'll find in the Color menu. This handy tool gives you an interactive look at how reducing the number of colours you are using for the picture will affect it.

The software can also use different reduction models to best suit the type of image, and the purpose it is to be put to. Again, this is an ideal tool for website graphics, which should always be as compact as possible to save download time.

Top Tips

• To really get the best results when scaling a brush, or reducing the size of a picture (or enlarging it), make sure that Color Average Resize and Qualitative are switched on in the Settings menu.

• If you want *PPaint* to start with your choice of palette you can do it by saving your edited palette as either UIColors.12 or UIColors.6 in the PPaint Prefs drawer (depending on the number of colours used).



***PPaint* can bypass the Workbench printer driver system to offer true 24-bit printing directly.**

Another one of these funky tools is the clipping set of functions. In the brush menu you'll find tools in the "Chop" submenu that allow you to strip a brush of any unnecessary bitplanes (for a 64-colour brush that you've taken from a 256-colour screen) and pixels (where it strips any background colour pixels from the outside of your brush, just leaving the content of the actual brush itself).

One of the features that first set *PPaint* apart from its main competitor, *Deluxe Paint*, was the inclusion of convolution operations in the "Process" tool on the toolbar.

These convolutions can do various things like blurring your image or darkening it by subjecting each pixel in the area you have selected to be processed to a mathematical process.

PPaint comes with a whole lot of convolutions defined, but the nicest thing is that you can always add your own, if you're that way inclined. But the best thing of all is the fact that *PPaint* is capable of far more than simple convolutions. It allows you to define your own dispersion routine or even a stereogram processor.

These functions mean that giving your image that extra touch of magic (or, of course, ruining it completely) is within your grasp as you reach for the process button. But we have run endless tutorials and features on getting the most from your paint package. Nick's been doing a *PPaint* tutorial on and off for the best part of a year and it's not the first one, so by now you should all be competent digital artists, well able to send us your work for inclusion in the Gallery.

Top Tips

• If you work with *CanDo* a lot, you'll know that it requires animbrushes to work with instead of simply animations. The version of *PPaint* you now have can convert one to the other, or back again, through its excellent ARexx port.

• You can set the DPI of your image if you save it as ILBM, but this will only work with programs that fully understand the whole IFF standard. Thus *PageStream* will recognise that your image is a higher resolution, but *Photoshop* on the Mac won't.

For those few of you who aren't accomplished bitmap painters, and there can only be a very few of you I'm sure, we can highly recommend getting books on the subject – yes, books.

Picking up any of them in your local bookshop will teach you the basics of light, perspective and composition. Whether you apply those teachings to

> "…this is an ideal tool for website graphics, which should always be as compact as possible…"



We can't say enough about *PPaint*'s superb palette merging facilities.

Top Tips

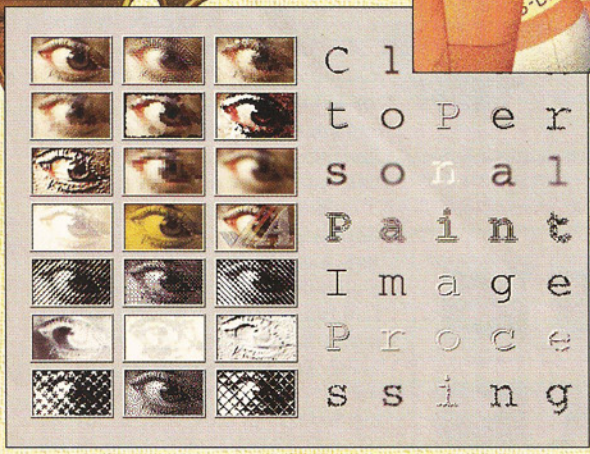
• If you are using a graphics card that only offers an 18-bit palette on a 256-colour screen, or an ECS machine, you can artificially give yourself a palette requestor that will offer you 256 levels of each of the RGB settings.
This is done by changing the REDBITS, GREENBITS and BLUEBITS to 8 in the "Startup_1.set" file.



Top Tips

• If you right click on the brush tools at the top of the toolbar, you'll either get a choice of brushes (if you click on the "1"), or a sizing tool to allow you to change the shape and size of the brush you are currently using.

• PPaint supports the clipboard for brushes. This means you can use it in conjunction with an icon editor to edit the brushes that make up your icon and copy them from *PPaint* into your icon editor, without having to save first.



Just some of the excellent image processing functions that *PPaint 7* is superb at producing. If you want more you can always add them.





canvas or your Amiga, the results should be the same – with one important difference.

In real life, the three primary colours are red, yellow and blue. In the digital world, they are red, green and blue, and digital colours (at least in this model) are additive.

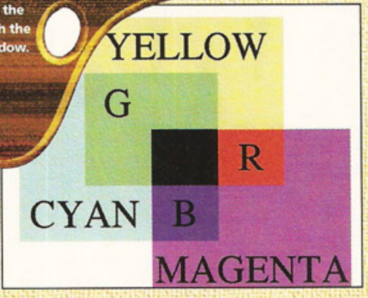
This means that as you add more of each one, the colour gets brighter. The more colour you add to your real-life palette, the muddier it will become.

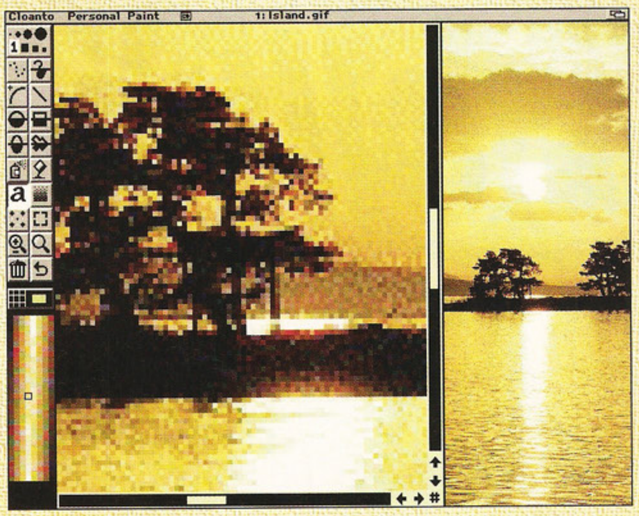
You should ignore the section on colour in these teach yourself books, unless you have a very Machiavellian mind and can translate this primary colour/additive conundrum.

Top Tips

• RexxMast should always be running on your machine. If it isn't running, the ARexx scripts won't work. To get RexxMast running, edit your S:user-startup file so that it contains the line: "Sys:System/Rexxmast >nil:".

• You can move around a magnified window using the cursor keys and the modifiers alt and shift, but it's also possible do it with the mouse. All you have to do is hold down the left alt key and then just drag the mouse through the magnify window.





(Left) This image shows how the RGB palette that we're all used to compares to the palette used for printing. (Above) Magnification in action.

UPGRADING?



If you've recently got another, older version of *Personal Paint* with a strange version number between 6.4 and 7.0, then you'll want to know exactly what you're going to be getting from this version. Here are some pointers:

- Four exclusive Kara fonts (KaraBrushed, KaraChiselSerif, KaraGranite, KaraRomanExtrude) and one exclusive Kara animfont (Bullion).
- 15 languages
- PostScript support
- ARexx capabilities and scripts for things like "Catalog", "AnimText", "EmbossAnim"
- Exclusive Cloanto artwork and animations.

Those canny bods amongst you might recall that Cloanto put out a free upgrade from *PPaint 7.0* to *7.1*. Don't bother spending your money downloading it or getting it off our *AFCD22*. Quite rightly, it won't work with this coverdisk version of *Personal Paint* – the special upgrade offer is still great value for money! See the Serious Disk pages for more details (page 95).

Why you should upgrade to *PPaint 7.1*:

- New and improved file formats, including GIF (licensed by Unisys), 24-bit DataTypes, PBM and TIM (loads TIM graphics files directly from Sony PlayStation CDs, with extended TIM saving options features for any developers out there)
- Professional Internet features like GIF animations, a map editor and everything you will need to achieve the maximum image quality in a compact size
- 181 ARexx commands with dozens of scripts directly accessible from the toolbar
- New ARexx scripts, including animation paths
- Improved support for environments like Siamese RTG, UAE and PowerPC
- Improved and extended manuals (in English, German and Italian)
- Special versions of *Personal Paint* compiled for different CPUs
- Cloanto Internet graphics DataTypes
- GIF utilities by third parties
- Cloanto *ColorType 3.1* software
- First Amiga software (excluding tools for developers) shipping with PowerPC code (*Personal Paint* PPC blitting library)
- New in the CD-ROM edition: developer documentation, reorganised manuals (no addenda – it's all in the right place), tutorial animations, extended artwork.

manuals (no addenda – it's all in the right place), tutorial animations,

Selling your work

Jason Jordache looks at issues of copyright and submitting graphics in the software industry.

With kids brought up on console games, there just aren't the same opportunities for them to grab a copy of *DPaint*, experiment, then, years later, find themselves creating the games they once played. For me, and many of you, we grew up on home computers with joysticks, 10 quid games and a copy of *OCP Art Studio*.

For some of you who now want to get into the games industry and have, or soon will have, sample graphics, we take a look at sending work to the software houses. Don't know their addresses? Try checking out the ads promoting the latest games and the recruitment pages at the back of *Edge* magazine.

The best way to break into the software industry is to create your own software demonstration disk.

> "The best way to break into the software industry is to create your own software demonstration disk."

In this article we'll be looking at making both Amiga and PC formatted versions of demo disks. Some houses won't accept Amiga disks, so it's worth checking beforehand. All of them will accept PC disks but you may like to make an Amiga version anyway as we'll be following this up with an autobooting Amiga disk for the PD libraries.

So starting with the PC, for Workbench 3 users it's just a case of clicking PC0, found in the Storage/DOSDrivers drawer, which enables you to read/write PC disks.

If you're unable to get disks formatted on a friend's PC, WB3 users can use Format from the System directory. Used with CrossDOS running, this will allow you to create the PC format. I'm unaware as to how sub-WB3 users can make their own PC disk other than to recruit a 1200 owning friend.

AT A GLANCE

- **Put your name and number at the bottom of all pictures and animations.**
- **Phone to check if they accept Amiga disks.**
- **Optimise your Amiga disk with ReOrg, but not the PC one. This adds a touch of finesse and will speed up the loading of icons and images. It also saves on the grinding you hear coming from the drive.**
- **Write-protect all disks before sending.**
- **No need for icons on the PC disk. Delete the .info files containing the icon data.**
- **Don't Powerpack anything you submit on a PC disk.**
- **If you can, do disk labels on a printer as they look more professional.**
- **State that it's a graphics disk on the label.**
- **Always put your name on the disk, along with your phone number and preferably your address too – don't bank on disks remaining with their accompanying letters.**
- **Address the envelope and covering letter to a person so it will get to the right place. Write their job title (e.g. Art Director) next to their name on the envelope.**

PREACHING TO THE IMAGES

If your paint program doesn't save in anything other than the standard ILBM file format then you'll need software like *ADPro* to convert the images.

Common formats for the PC are GIF, PCX, BMP and JPEG. The first three are like ILBM in that they retain all image data, unlike JPEG which blends the pixels. This can reduce the image quality depending on the amount of compression, though it can often make a picture look better.

This only works up to a point. JPEG can ensure minute file sizes, though for line art or pixel-pushed *DPaint* work, it's not so good as you'll visibly see image deterioration. You can still use JPEG without turning up image compression to prevent this decay but the files then become larger than GIFs.

PCX is like ILBM in that the file sizes are larger compared to their GIF equivalents. I use GIFs for everything on the computer and JPEG for images I've painted on paper and scanned.

The files on the PC disk should be in the format of, say, HELMET.GIF. That's no more than an eight letter file name, a full stop and a three letter suffix, JPG, LBM, TXT (for text files) and so on.

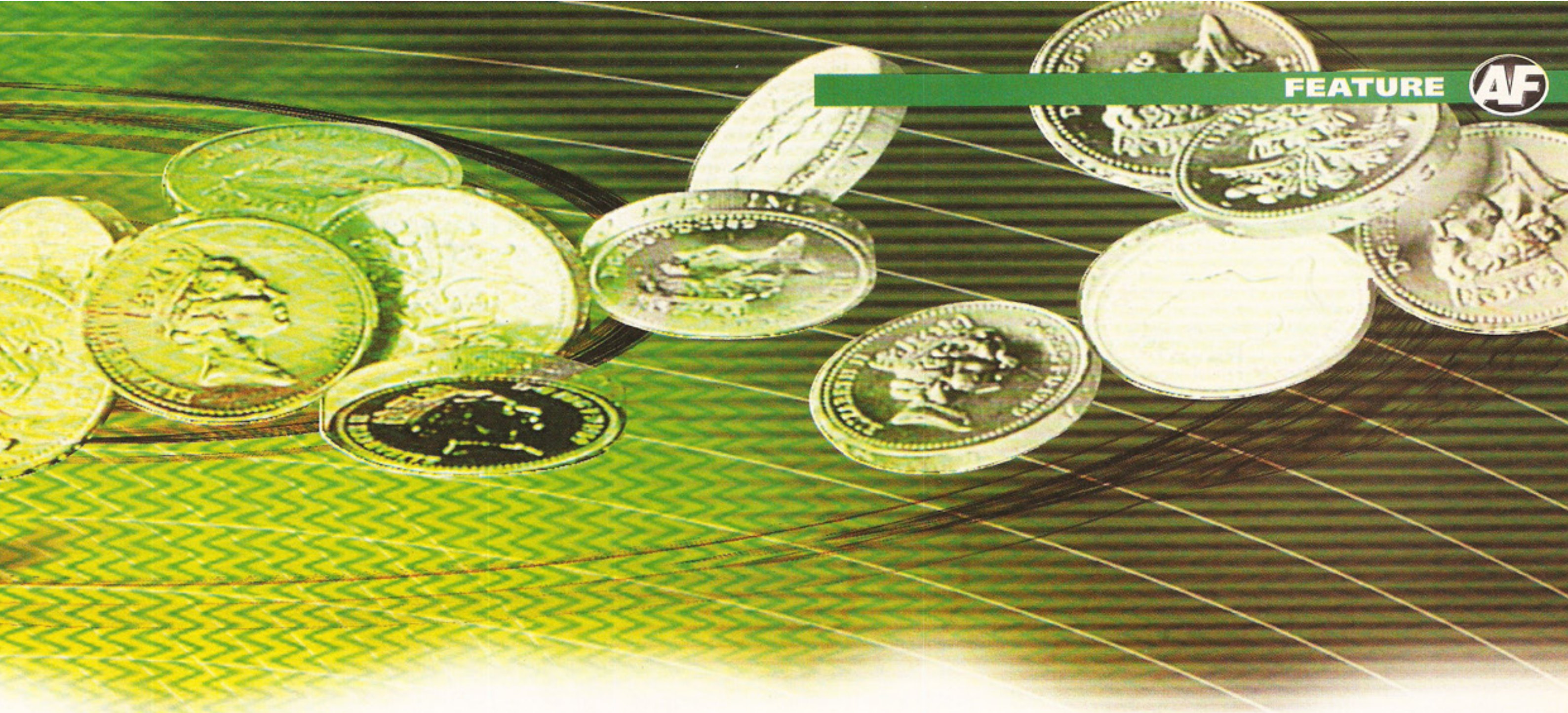
Though you'll get letters back saying your work is being kept on file, software houses get so many disks through the post that when they do come to recruit more artists they'll be delving into recent submissions. As such, it's a good idea if you've built up more samples to keep sending them in every few months or so.

ANIMATIONS

For your Amiga disk, *Powerpacker* will crush anims and ILBMs without any loss of quality. They'll take slightly longer to load but shouldn't wear out your patience. Animations are highly recommended and they are often invaluable to the success of your efforts as they give a whole new dimension to the static screen, bringing alive your sprites and graphics.

These *Powerpacked* files won't just load into *DPaint*. You need a handy utility called *PP* (*Power Patcher*) that lurks in the background, auto-decrunching images and anims when a viewer program (*PPShow, DPaint,* etc) tries to load them. It's worth including this on your Amiga disks.

If you have to send your work in on PC disks then you will need to do that little bit more. PCs can't play the standard anim formats we Amiga owners enjoy, so what you need is *Main Actor*, a program for converting anims to a PC format like AVI. One other thing – don't use *Powerpacker* or some other crunch program on the PC disk as they won't be able to view it.



SENDING YOUR BOUNTY

Typically your credits at the bottom of work will be of the format: 'Copyright Tim Leary 1996 +44 (0)1800 100666'.

You may like to include a text file on the disks with a contact address and number or CV.

Always write 'Magnetic Media – Do Not X-Ray' on the front of the jiffy bag. Along with disks and CV, if you have one, include a covering letter. Ask who you can submit graphics to and address it to them.

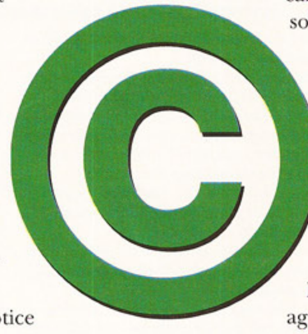
COPYRIGHT MYTHS EXPOSED

My tutor at university was busy on his first graphic design assignment for a client. He went through all the handshakes but the little detail of having an agreement signed was left out. The client who was doing the commissioning, commenting, approving and making suggestions on the development of ideas, turned round when it came to coughing up the pennies and said, "What payment?"

The work was done, but my tutor and his team had been ripped off, just one example of why you can't be too careful. You also hear that if there is no copyright notice then it's alright to use the work.

This is false. In the UK, and for most European companies and other western corporations, you don't legally need to have a copyright notice. You don't have to register and there are no registration facilities. Copyright is automatically granted at the moment you create your work.

"It's important to realise in law that the burden of proof of copyright ownership rests with the author of the work."



It's important to realise in law that the burden of proof of copyright ownership rests with the author of the work. One simple way to prove copyright ownership is to send yourself a copy of the work via registered post and leave the envelope unopened. This can be opened in the presence of a solicitor or appropriate official should the need arise.

Along with sending in disks, you could also make use of a video tape. All you need is a lead from your Amiga to VCR, available from somewhere like Tandy. If you've spent months developing a brand new gaming genre, you can ask the software house to sign a non-disclosure agreement for when you go and discuss your ideas with them in person.

People also think you must have the copyright symbol on a work of art for it to be valid in the UK.

This is incorrect, though if you include the copyright symbol, your name and the year of creation, people will be aware of your claim , although there is no actual legal requirement.

Hope these suggestions prove useful to you and that we will be hearing about you in the future.

Good luck, Amigans!



IN YER BEDROOM OUTFITS

Be careful of small timers. They'll phone you up calling themselves a 'Manager' but more often than not the deal isn't the ideal freelance position you were looking for. They are just another of the scores of teams who sincerely want to succeed but find that their hopes fade to nothing.

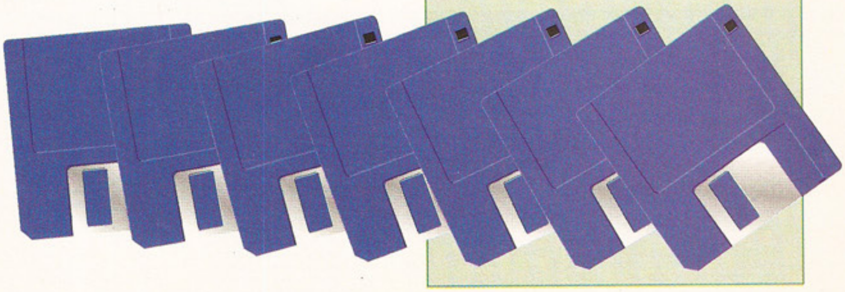
Too bad, since you were on a royalties scheme, spending months working on graphics only to hear the project's fallen through. Best stick with the established software houses. Don't unwittingly stick with the small outfits for fear of going for the larger companies.

IT COULD BE YOU

Forget worrying about all those disks you'll never see again. With subtle cunning I've managed to blag sack-loads of disks from friends, intending to use them only once. Instead of Argos disks retailing at 60p a throw, buy in bulk – say 50-100 at a time.

You needn't pay more than 20p a disk if you shop around, as there are always people trying to unload their excess coverdisk collections (from inferior mags, natch).

For the software houses, you could include a SAE for returns. However, I've always thought it better to leave the disks in an office to increase the chances of that phone call. Once over a month passed until they called, another time they called the morning they got my parcel. On both occasions it led to a job offer.



Graphics & Video

The Eyetech 1-slot Zorro adapter, CV64/ 3D graphics card and the AUTO-MON CV64 3D & Amiga RGB video switch.



Eyetech 1-slot Zorro adapter	£99.95
Eyetech 7-slot Zorro adapter	£149.95
1-slot to 7-slot Zorro upgrade	£79.95
CV 64/3D 4MB graphics card	£159.95
1-slot Zorro + CV64/3D bundle	£249.95
AUTO-MON video switch	£39.95

The MK2 EZ-VGA Auto scan doubler adapter is now available with optional flicker-fixer for rock-steady 'interlaced' PAL/NTSC display modes

EZ-VGA Mk2 upgradeable scandoubler	£79.95
EZ-VGAPlus scandoubler/flickerfixer	£119.95
Upgrade EZ-VGA Mk2 to EZ-VGAPlus	£50.00
Engineering-workstation quality 17" monitor, 0.26 dot pitch, 1600 x 1280 @75Hz non-interlaced, 1yr on-site + 2yrs RTB warranty	£399.95

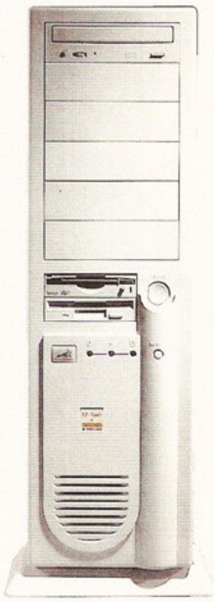
Eyetech EZ-TOWER Options

	Backplate Kit	DIY EZ-Tower	Full EZ-Tower	EZ-Tower Plus	Infinitiv tower	Power tower
DF0: face plate, cable	Yes	Yes	Yes	Yes	Yes	Yes
Custom backpanel with SCSI/audio KO's	Yes	Yes	Yes	Yes	Yes	Yes
A1200 power and LED adapters	Yes	Yes	Yes	Yes	Yes	Yes
CE-approved metal PC case	n/a	Yes	Yes	Yes	Plastic	Metal
No of bays/PSU capacity	n/a	10/250W	10/250W	10/250W	5*/200W	7/200W
Accessible PCMCIA slot	Yes	Yes	Yes	Yes	+£24.95	+£29.95
DIY assembly instructions	Yes	Yes	n/a	n/a	n/a	n/a
Installation instructions	Yes	Yes	Yes	Yes	Yes	Yes
PC board/Siamese compatibility	Yes	Yes	Yes	Yes	No	No
Assembled & A1200-ready	No	No	Yes	Yes	Yes	Yes
EZ-Key adapter & Win95 k/b*	Option	Option	Option	Yes	Yes	Yes
Eyetech installation option	No	No	Yes	Yes	n/a	n/a
Cost with options as specified	£39.95	£79.95	£99.95	£148.95	£204.85*	£179.90

* The Eyetech *EZ-Key* adapter autodetects Amiga & PC keyboards & has two selectable PC keyboard mappings. Other keyboard adapters are single function only.

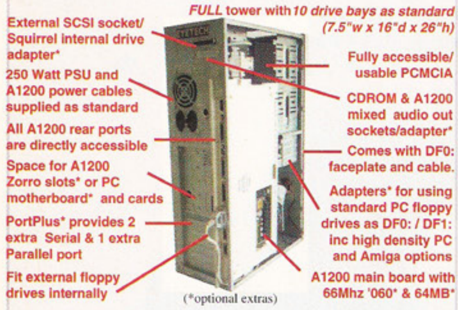
* with additional clip-on 5.25" drive bay

Other A1200 towers (for comparison - based on last magazine specs. E&OE)



The A1200 EZ-Tower

"This definitely one of the easiest solutions to building your own tower." Amiga Format
"The Eyetech tower offers clever solutions with a Velcro easyfit mentality" Cu Amiga



(*optional extras)

Now You've Got Tower Power!

Apollo Accelerators

A600 33 MHz '030 MMU & FPU to 32MB (7 Mips)	- Just £69.95
A1200 25MHz '030 with MMU & FPU. (5 Mips)	- Just £68.95
A1200 33MHz '030 with MMU & FPU. (7 Mips)	- Just £79.95
A1200 25MHz '040 with MMU & FPU. (19 Mips)	- Only £128.95
A1200 33MHz '040 with MMU & FPU. (25 Mips)	- Only £158.95
A1200 40MHz '040 with MMU & FPU. (30 Mips)	- Only £188.95
A1200 50MHz '060 with MMU & FPU. (39 Mips)	- Only £268.95
A1200 66MHz '060 with MMU & FPU. (51 Mips)	- Only £318.95

phase5 PowerUp PPC + '040/'060 Accelerators

Without SCSI (not upgradeable)

A1200 160 MHz PPC with '040/25/MMU/FPU.	- Only £238.95
A1200 160 MHz PPC with '060/50/MMU/FPU.	- Only £438.95
A1200 250 MHz PPC with '040/25/MMU/FPU.	- Only £348.95
A1200 250 MHz PPC with '060/50/MMU/FPU.	- Only £568.95

With factory-fitted onboard Fast-SCSI II interface - add just £50 to the above prices

4MB - £13.75; 8MB - £24.95;16MB - £34.95; 32MB - £69.95

Limited offer - 20% off these memory prices when purchased with an Apollo or phase5 PowerUp PPC accelerator!

A1200 *TowerDrives*

Thinking of buying a **BIG** drive? Dont waste your money on ***ANY DRIVE OVER 4.3GB*** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). They appear to work but overwrite the RDB after 4.3GB into the drive. Be warned!

√ All drives come ready-to-use with WB3.0 preinstalled & WB2.x install script.

√ All drives over 100MB come with over 45 top quality utilities (not shovelware) ***and*** MMe multimedia authoring software preinstalled, configured and ready-to-run.

TowerDrives: 1.2GB £109.95
1.7GB £119.95 2.11GB £139.95
3.2GB £164.95 4.3GB *(max!)* £199.95

2.5" InstantDrives for the A600/A1200/SX32

20MB	An entry-level drive for the SX32/A600.	£34.95
170MB	An entry-level drive for the SX32Pro/A1200	£69.95
720MB	A drive for serious A1200/SX32 Pro users	£129.95
1.4GB	A high performance drive for power users	£169.95
1.8GB	Top-class drive for the A1200/SX32Pro	£189.95

See price list for bare CDROM units & unformatted drives

Stop Press! New products from Eyetech.

√ **24-bit SCSI 600 dpi 1-pass flatbed scanner & ScanQuix3 scanner software (with PC & Mac s/w)** £189.95

√ **CD writer - 8xread, 2x write with software & cables. Back up 650MB for around £1** *(Buffered i/f & EZ-IDE needed)* £298.95

Looking for an all-in-one package? Why not treat yourself to the Eyetech EZ-Tower Professional Pack 2?

Just look what you get for an unbelievable *£799.95!*



The Eyetech Professional pack comes with a full EZ-Tower, new WB3.1 A1200 and ...



EZ-KEY & Win95 k/b,



33MHz '040 & 16MB fast RAM,



16x CDROM, 2.1GB HD, EZ-IDE s/w & 4-way EIDE i/f .

√ ***EZ-Tower*** with full UK specification A1200, ***Kickstart 3.1/Workbench 3.1*** disks and manuals, mouse, mousemat, TV lead and 250watt psu.

√ ***EZ-Key*** keyboard adapter, ***Windows95 keyboard.***

√ ***33MHz '040*** processor (approx 25 Mips) with MMU & FPU and ***16MB*** of program memory.

√ ***2.1GB TowerDrive*** with Workbench 3.1 and shareware utilities preinstalled

√ ***16-speed CDROM*** including the ***Eyetech 4-device buffered interface*** with ***fully registered EZ-IDE*** CDROM/hard drive/IDE Zip drive/LS120 driver software (see main ad for EZ-IDE details)

√ ***880KB floppy drive*** including faceplate

√ Fantastic software bundle including ***Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz***

√ All items fully installed, tested and ready-to-go!

AND the option to have:

√ An ***LS120*** 720KB/1.44MB/120MB super floppy drive/cable installed in your machine for ***just £84.95 extra*** (at time of purchase only)



The optional LS120 120MB Superfloppy

The fantastic Siamese RTG2.5 ethernet graphics system for your Amiga ...



... Just add a PC motherboard and it becomes the perfect partner for your EZ-Tower'd A1200!

Then use PC-side hard & floppy drives, CDROMS, printers and graphics cards as native Amiga peripherals!

The Eyetech Ethernet Siamese pack contains:

√ A1200 PCMCIA ethernet card and driver software

√ PC ethernet card and driver s/w

√ Ethernet cable, 'T' pieces and terminators

√ Full Siamese RTG2.5 software

All this for just £199.95!!!

(Amiga TCP/IP stack & Win95 O/S required)

Love your A1200 but need PC compatibility for work or study purposes? Then you need Eyetechs EZPC-Tower system!



Just *£999.95* gets you a fully loaded Siamese ethernet system with:



EZPC & Amiga ethernet adapter



HD,CDROM,FDD & optional CDROM Writer upgrade

√ A full Amiga ***EZ-Tower*** system ***ready to take your A1200.***

√ Jumperless 266MHz-capable PC Pentium board with ***200Mhz cpu, 32MB*** of memory, ***Win95 keyboard & mouse*** & second fan.

√ ***Full-screen full motion full colour video capture*** card with ***TV tuner and frame grabber*** (with video camera input).

√ High performance, ***high res graphics card*** with full screen/full frame rate ***MPEG playback.***

√ ***32-voice*** high performance ***sound card*** with direct-to-disk, ***CD-quality recording software.***

√ ***2.1GB*** hard drive, ***16-speed*** CDROM, ***2x S,1xP & USB ports*** and 1.44MB FDD

√ Full ***ethernet Siamese 2.5RTG*** system with ***Amiga and PC ethernet cards***, driver software, cables & terminators and ***scandoubling system for non-retargetable Amiga screens*** such as games. (The ethernet Siamese system requires an Amiga TCP/IP stack - as used by Internet software - and Windows95 operating system - see below).

EZPC options (at time of ordering only) :

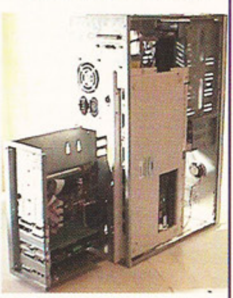
√ CDROM upgrade to CDROM 2x writer, 8x reader ***+£249.95***

√ Windows 95R2 OS & Lotus Smartsuite bundle (WordPro, Lotus 123, Approach Database, Organiser, Freelance Graphics etc) ***+£99.95***

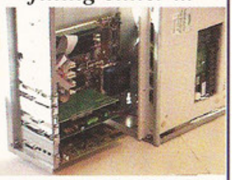
√ Miami Amiga TCP/IP stack (fully registered) ***+£29.95***

Ring for hard drive, CDROM, memory & processor upgrade options

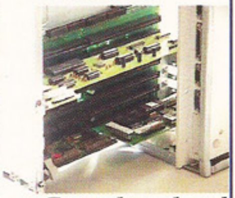
All EZ-Towers ...



...feature a slide-out mounting frame for fitting either ...



...a standard PC motherboard and cards, or...



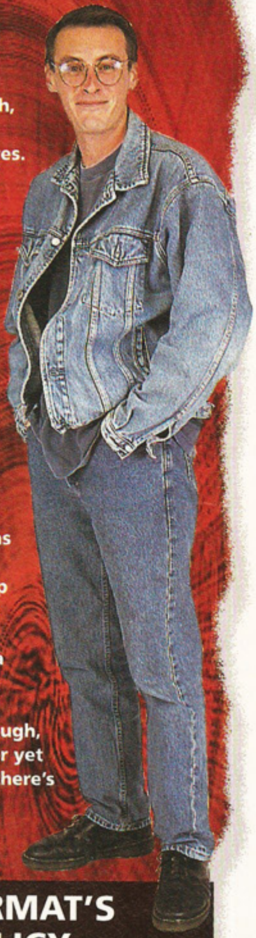
...a Zorro board and cards (as well as your A1200).

The Eyetech Amiga parts and price list - May 1998 issues

Interfaces and adapters		
ADPT-AUD-EZTW	EZTwr audio mixr/adapter for A1200/CDROM	19.95
ADPT-AUD-RCA	RCA(phono)-M -> 2xRCA-F adapter	2.50
ADPT-AUD-RCA-G	RCA(phono)-M ->2xRCA-F gold plated adapt	3.50
ADPT-CDPL-PWR	CDPlus external power socket + HD pwrcab	9.95
ADPT-DF0-FP	Tower faceplate adapter for A1200 int FD	6.95
ADPT-DF0-TWR	34-34 way cable and faceplate for DF0	12.95
ADPT-ETH-BNCT	BNC T-piece 2xM + 1xF	4.95
ADPT-ETH-TERM	Ethernet BNC coax terminator 50R	4.95
ADPT-EZKY	Amiga/PC k/b -> A1200 kbd ribbon cable	39.95
ADPT-EZKY-A4K	A1200 EZKey/6p->5p adptr/A4000 kbd bundle	79.95
ADPT-EZKY-W95	Amiga/PC k/b->A1200 rib cab+Win95 kbd	49.95
ADPT-HD-2/3	2.5"/44way -> 3.5"/40w+4w & mtg bracket	11.95
ADPT-HD-3/5	3.5" Zip/SyQuest/FDD/HD brkt/pl ->5" bay	5.95
ADPT-KBD-5P6P	Amiga/PC k/b adapter 5p din-F ->6p m/d-M	5.95
ADPT-KBD-6P5P	Amiga/PC kbd adapter 6p mindin-F ->5pd-M	5.95
ADPT-PCM-ETH	PCMCIA ethernet card with Amiga/PC drvrs	89.95
ADPT-SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	12.95
ADPT-SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95
ADPT-SCSI-EZTW	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	19.95
ADPT-SQ3-PAR	SQ3 adapter Epson scanner->par prt cable	9.95
ADPT-SW-S/K	Dual monitor & k/b switchbox	19.95
ADPT-VGA-15M23M	VGA 15pHD-M -> 23pD-M Amiga RGB adapter	14.95
ADPT-VGA-15M9F	Adapter from 15p HD-M VGA to 9pD-F	9.95
ADPT-VGA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95
ADPT-VGA-BUF	Amiga 23pin-F to 15pinHD-F VGA adapter	19.95
ADPT-VGA-SDBL2	Hardware external scandoubler for A1200	79.95
ADPT-VGA-SDFF	Hardware external scandoubler for A1200	119.95
ADPT-VGA-SDUG	SDBL2 to SD-flickerfixer u/g	50.00
ADPT-VGA-UNBF	Amiga 23 pin(f)-15 pin HD(f) VGA adapter	12.95
INT-12C-DSKPL	DiskPlus FDD D/H/S dens i/t A1200clkport	69.95
INT-12I-DSKPL	DiskPlus D/H/S dens Am/PC FDD 1200 IDEpt	64.95
INT-12I-EZCD4	Mk4 4-dev buf i/f IDE/ATAPI -A1200 CD w/AIPD	39.95
INT-12I-EZCD3	Mk3 4-dev buf i/f IDE/ATAPI -A1200 CD	29.95
INT-4KI-CD4	4-device EIDE interface for A4000	19.95
INT-4KI-DSKPL	DiskPlus Fdd D/H/S dens Am/PC A4K IDE pt	69.95
INT-FDD-DF0	Interface for std Sony FDD for DF0 880KB	14.95
INT-SER-PPL	PortPlus 2x 460kb ser + hispeed par port	79.95
INT-SER-PTJR	PortJunior - 460KB serial i/f for A1200	39.95
Zorro 2/3 boards and adapters		
ADPT-Z2-A12/1	A1200 ZII adapter with 1 ZII slot	99.95
ADPT-Z2-A12/1/K	A1200 ZII slot with PC/A2000 k/b interfc	134.95
ADPT-Z2-A12/7	A1200 ZII adapter w/ 7xZII + 5xISA slots	149.95
ADPT-Z2-A12/7/UG	A1200 ZII adapter 1->7 slot u/g (p/x)	79.95
ADPT-Z2-KBUG	Keyboard interface upgrade for Z2 adpter	35.00
GFX-C643D	Cybervision 64/3D Z2/3 Amiga graphix crd	159.95
GFX-Z2-CV/Z2-1	1-slot Z2 +C643D bundle without f/fixer	249.95
GG2-ISA-ETH	NE2000 ISA ethernet card BNC for GG2-BB	19.95
GG2-ISA-MIO	Multi-I/O ISA card 2xIDE,2xSER,1xP	14.95
GG2-Z2-BB	GG2 Zorro2 brigeboard for PC ISA periphs	119.95
INT-Z2-IDEPL	IDEPlus 6xIDE+2x DD/HD Am/PC FDD Zorro2	69.95
INT-Z2-PPL3	PortPlus Zorro 2xS, 1xP, expansion bus	69.95
INT-Z2-PPL4	PortPlus4 - Zorro 4xSerial + expansn bus	89.95
INT-Z2-PPX	2xS +1xP expansion for INT-Z2-PPL3/4	59.95
Cables		
CAB-AUD-CD	CDROM invt'd T audio cab .6m + 2xRCA plg	9.95
CAB-AUD-MIX	RCA(phono)-M -> RCA-M+RCA-F mix ld 1.8m	6.95
CAB-AUD-MJ/PH	3.5mm st minijack->2xphono-M plugs 1.2m	5.95
CAB-BT-EX10	10m BT extn cable + 2 way phone adapter	9.95
CAB-BT-MOD	FCC684/6 to BT4 modem phone lead 1m	5.95
CAB-ETH-60C	Ethernet coax/BNC-F 60cm for Siamese	9.95
CAB-FDD-EX2M	External FDD extn cab 23-M -> 23-F 2m	14.95
CAB-FDD-EX50C	External FDD extn cab 23-M -> 23-F 0.5m	12.95
CAB-HD-FD/4	23p-M-floppy -> 4p-F HD/CD pwr 0.9m	9.95
CAB-HD-KIT	A1200 full 3.5" hard drive fitting kit	24.95
CAB-HD-PWXTN	4p-M -> 4p-F HD/CD power cab ext 0.9m	9.95
CAB-IEC-1.5M	AC power cable 13A plug -> IEC skt 1.5m	2.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F	19.95
CAB-KBD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
CAB-KBD-MM	5p DIN M - 5p DIN M k/b cable 1.2m	7.95
CAB-PD-30C	44->40way 3.5" HD data & pwr cabs -A1200	14.95
CAB-SCS-25/50	SCSI cable DB25-M -> Cent50-M 1m	9.95
CAB-SCS-25M/25M	SCSI cable DB25M-DB25M mac type	9.95
CAB-SCS-50M/50M	SCSI cable Centr50M->Centr50M 1m	9.95
CAB-SER-EX2M	DB25-M -> DB25-F RS232 extn cab 2m	7.95
CAB-SER-EX50C	DB25-M -> DB25-F RS232 extn cab 0.5m	6.95
CAB-SER-SSQ	9pDM->9pDF SurfSq EZTwr ser extn cab 50cm	9.95
CAB-UPT-X60C	Crossed twisted pair/RJ45 for Sisys 60cm	6.95
CAB-VGA-10H15M	10p IDC-F header->VGA 15pHD-M	12.95
CAB-VGA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	9.95
CAB-VGA-MM	15p DM-HD -15p DM-HD VGA cable 2m	9.95
CAB22-2W-9C	22way-Fx2 A1200 clock port cable 9cm o/a	5.00
CAB34-2W-50C	34way-F x2 FDD ribbon cable for tower	9.95
CAB40-2W-20C	40 way IDE cable 2 connector 20cm	5.00
CAB40-3W-1M	40Way IDE/HD/CD cable 3 contr 1m o/a len	9.95
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	9.95
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	19.95
CAB40-DDC	IDE IDC40-F -> IDC40-M with mtgs 15cm	9.95
CAB44-2W-13C	44way (2.5" HD) cable 2 cntr, 13cm o/a	9.95
CAB44-2W-60C	44way (2.5" HD) cable 2cntr, 60cm o/a	19.95
CAB44-2W-9C	44way (2.5" HD) cable 2 cntr, 9cm o/a	8.95
CAB44-3W-12C	44way (2.5" HD) cable 3 cntr, 12cm o/a	12.95
CAB44-3W-24C	44way (2.5" HD) 7+17cm,3 cntr,24cm o/a	14.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CAB44-CD-9C	44way (2.5" HD) cable pur with CD/HD 9cm	5.00
CABPW-1W-1F	Power converter cab HD-M -> FD-F	4.95
CABPW-2W-1H1F	HD/FD pwr splitter HD-M->1xHD-F/1xFD-F	6.95
CABPW-2W-2F	FDD power splitter 4pM->2xFD-F	6.95
CABPW-2W-2H	HD/CD pwr splitter 4p-M ->2x 4p-F 15cm	6.95
CABPW-3W-2H1F	HD/FD pwr splitter HD-M->2xHD-F/1xFD-F	8.95
CABPW-3W-3H	HD power splitter HD-M -> 3xHD-F	8.95
CABPW-4W-3H1F	Tower power expdr 4pM->3x4pM+FDDpwr	11.95

SCREENPLAY

The latest games, hints and some clever programming from you!



After a bit of an explosion over Christmas, the fall-out has left us with, well, no new games actually. Re-releases, yes. New games, no. There aren't any new games to preview either. Oh dear. That doesn't mean people have stopped developing for the Amiga however – it just means that it's too early to show you screenshots of the games that aren't due until the end of the year, and that the cruel mistress, developer slippage, has been doing her work.

There are some top games just around the corner, but sometimes adding that little extra polish can take longer than anticipated. We shouldn't grumble though, extra playtesting never yet harmed a game! And there's always next month...

Andy Smith

AMIGA FORMAT'S REVIEW POLICY

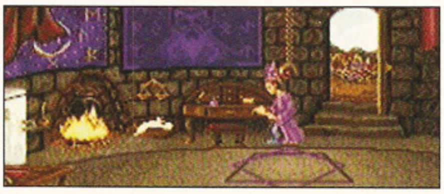
WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws are not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet..
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

28 SIMON THE SORCEROR

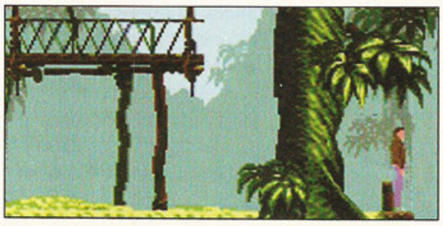
The chucklesome graphic adventure gets a new lease of life. Has it still got the magic?



Simon sits and contemplates life as a re-release.

30 FLASHBACK

Silky smooth graphics and challenging gameplay in this top French action puzzler.



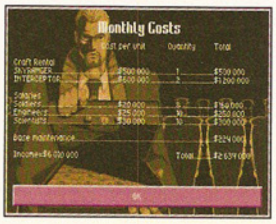
Looks stunning, moves even more impressively.

34 READER GAMES

The games designed, written and submitted by you, the *Amiga Format* readers.

Conflict . . . . Gordon Miller
The *Frontier* clone returns.
Blob . . . . . David Johnson and Dennis Ng
Splendid multi-player platform action.
Koonky . . . . E. Manzonni
A puzzlingly wacky game.
Maze Escape . . . . Garry Newman
Can you find your way out?
Rhythm King . . . . Will Morton
Ever fancied managing Oasis? Now you can!
Burst a Marble . . . David and Philip Ball
Yup, it's a *Bust A Move* clone!
X's and O's . . . . John Gray
Or noughts and crosses to you and me.
Amigapets . . . . Anthony Kelly
More of a *Dogz* clone than an Amigotchi.

40 U.F.O. TIPS SPECIAL



Give yourself a head start in the fight against the aliens with some top tips!

How to repel the alien threat – the definitive guide.

29 PLAYER MANAGER 2

After the terrible *CM2*, will this be the game to finally get Bristol Rovers to the top?



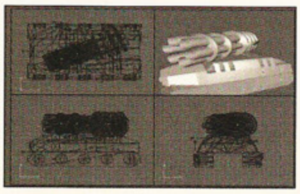
Have you got what it takes to run a top club?

32 W.I.P. NAPALM

After *Myst* and *Quake*, we bring you an exclusive look at clickBOOM's latest – *Napalm*!





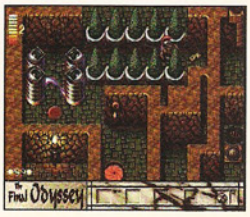


Early pictures of tanks, planes, guns, explosions and mayhem – looks good already!

42 GAMEBUSTERS

The second part of our huge solution to Vulcan's excellent *Final Odyssey*.





Hints, cheats and a huge guide to help you out.

Simon the Sorceror CD

Britain's answer to the Monkey Island series gets another airing, so Andy Smith gets out his crystal ball...

First things first. If you've got an IDE CD-ROM then you're going to have problems playing this game. You'll be fine if you've got a CD32 (Hello Billy! Glad to know you're still with us...) or a SCSI CD-ROM but you are going to be tearing your hair out with an IDE machine.

Epic assure us you can get the game to run with an IDE CD-ROM but the speech is a bit clipped, especially on the intro. And, as luck would have it, I've got an IDE CD-ROM on the office A1200 and even the technical wizardry of Nick Veitch failed to get the game running satisfactorily. Out came the CD32.





> I don't want to be unfair because there really is quite a lot of genuine humour in Simon the Sorceror...

This point and click graphic adventure owes a lot to the *Monkey Island* series: the dreadful puns, one-liners and assorted groan-inducing gags are all of the type done so successfully in those games. Except they were done a bit better in *Monkey Island*. I don't want to be unfair because there really is quite a lot of genuine humour in *Simon the Sorceror,* brought to life by the voice-over from Chris 'Rimmer' Barrie. If you don't know him from *Red Dwarf then* you probably know him as Mr Brittas.

In fact, the voice-over is the biggest difference between this CD version and the ordinary AGA one that first appeared a couple of years ago. Back then you had to sit through tedious amounts of text on screen whenever anything spoke – and they liked to talk a lot.

When you're only listening to stuff it is much less painful to endure.

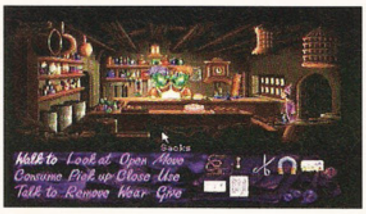
The graphics are sumptuous but the game does suffer from a problem that affects far more adventure games than it should – you've got to search a location with a fine tooth comb to find what are usually vital clues. Objects sometimes have a detection area that's just too damn small. This doesn't make the game unplayable but it makes the experience more tedious than it would have been otherwise.

Oh yeah, almost forgot. The game's all about some kid called Simon who's got to search a mystical island for a lost magician called Calypso. Of course, on his search for clues Simon's going to be getting into all sorts of scrapes and meeting all sorts of weird and wacky characters.

It's very well paced because even though there are times when you're wandering around the same locations time after time because you haven't found the teeny item hiding in the corner, it's not the sort of game that leaves you in much doubt as to where you should be going.

Small gripes aside, this is a good, fun game. The puzzles are complex so it's going to take a while to complete but you'll enjoy the process.

It's not going to blow your mind and it's not as good as either of the *Monkey Island* games, but for something that's in a very similar vein you can't really go wrong with this – just check out your machine spec before shelling out.



This two-headed shopkeeper doesn't half wibble on. At times, playing Simon the Sorceror can be like talking to Ben about the Internet...



Search every room for clues because some are very tiny indeed and can easily be missed.



This chap on the right has the voice of the bloke from Withnail and I who invented the Camberwell Carrot.







Call up the map to quickly go to places where you've already been – very handy indeed.

PUBLISHER: Epic Marketing (01793 514188)
PRICE: £14.99
VERSIONS: CD32 A1200
REQUIREMENTS: SCSI CD-ROM or CD32
RELEASE DATE: Out now

GRAPHICS: ●●●●○
The graphics really are very lovely and the animation is as smooth as whipped cream.

SOUND: ●●●●○
Excellent speech, complete with intonation and everything!

ADDICTION: ●●●○○
Missing tiny details can be frustrating but it's relatively easy to progress.

PLAYABILITY: ●●●●○
Simply point, simply click. Simple simplicity.

OVERALL VERDICT:
A fine graphic adventure that's complex and challenging. Well worth grabbing hold of if you missed it first (or second) time round.

80%

Re-releases

Player Manager 2 EXTRA

One of the best football management sims gets another kick of the ball. Andy Smith rises gracefully to knock it into the back of the net...



Regular readers will know that it's at about this stage of a football management review that I launch into a sentimental monologue about the (mis)fortunes of Bristol Rovers. I promise not to do that with this review.

After the awful *Championship Manager 2* (*AF108* 12%), a game we'd waited 2 years to get our hands on, it's something of a relief that one of the better footy manny games of the last few years gets a return visit to the shop shelves.

Let's start with the bad bits though, because one of the biggest problems with *CM2* was the fact that it was terminally slow and required an inordinate amount of disk swapping. *PM2E* suffers a little from this latter problem itself.

Although the game's A1200 only, there's no way to install the thing to a hard drive. This does mean there's a fair ol' bit of disk swapping (especially if you haven't got a second disk drive), not to the point where the fun's ruined, but it's going to lose a couple of marks because there's still no hard disk installer.

And so to the game. Everything's well presented with nicely rendered intro screens and it's easy to find your way around the place. There are reams of options for the player to get stuck into, from the usual training and tactics decisions to deciding on the sponsorship offers you're given.

There's also a large arcade side of the game where you can either play the whole team, as in a normal arcade footy game, or where you simply play in position.

Frankly, the arcade part of the game isn't up to much. Although it's not too bad, it's just not as much fun as concentrating on the pure management side of things.

And if you do concentrate on that side of things you'll have a lot of fun. Unfortunately, there's no 'impatient player' option that allows you to just pick a team and then see the result. You either have to watch the highlights of the game (the best option for the first few turns because it does manage to build the excitement) or watch a lot of spots chase another spot around in the overhead scanner mode.

This is the best long-term option once you've grown tired of the highlights, which do have a tendency to repeat a little too often.

There are better football management games – *Premier Manager 3* (*AF66* 85%) and *Ultimate Soccer Manager* (*AF72* 85%) for example – but they might be a little difficult to get hold of these days.

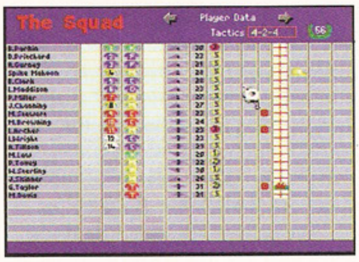
Player Manager 2 Extra is well worth hunting down, but just don't expect too much from the arcade side of the game.



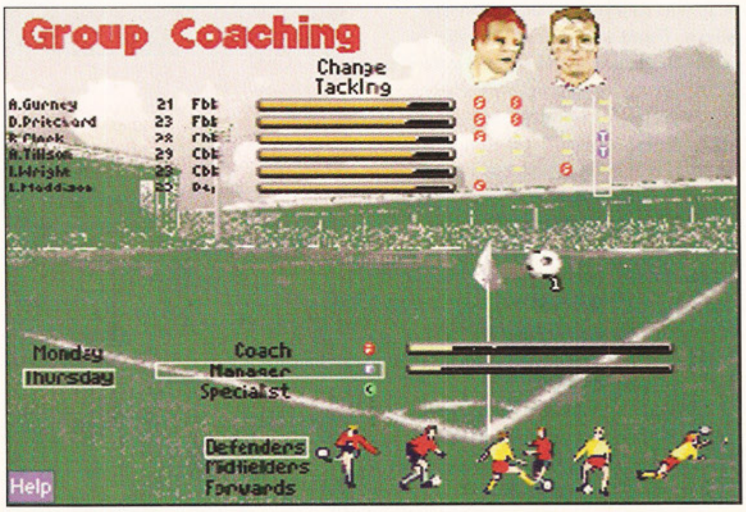
Obviously, every manager spends the off-season lounging around on the beach.



> **Everything's well presented with nicely rendered intro screens and it's easy to find your way around the place.**



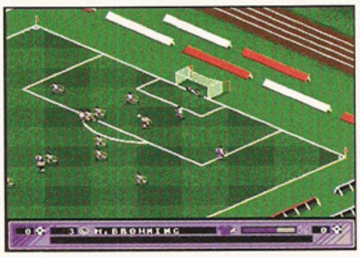
The very detailed information on your team. Check here often to see which players are improving and which players are slacking.



The all-important coaching schedule. Get the right players doing the right things and watch your squad improve – until the injuries start to mess everything up, that is.



The highlight option (above) and the arcade game (below). Both look better than they really are.



PUBLISHER: Epic Marketing (01793 514188)
PRICE: £19.99
VERSIONS: A1200
REQUIREMENTS: A1200
RELEASE DATE: Out now

GRAPHICS: ●●●○○
Nicely rendered screens here and there. Text elsewhere.

SOUND: ●○○○○
Don't worry about it. It's not important.

ADDICTION: ●●●○○
It's tough but the challenge is rewarding.

PLAYABILITY: ●●●○○
Once you've found your way round you won't get lost again.

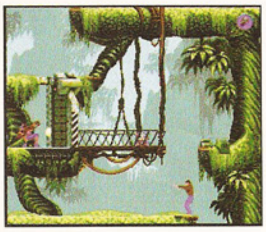
OVERALL VERDICT:
It's a good management game with a weak arcade side. It's not the greatest in the world but it's still enjoyable.

78%

Flashback





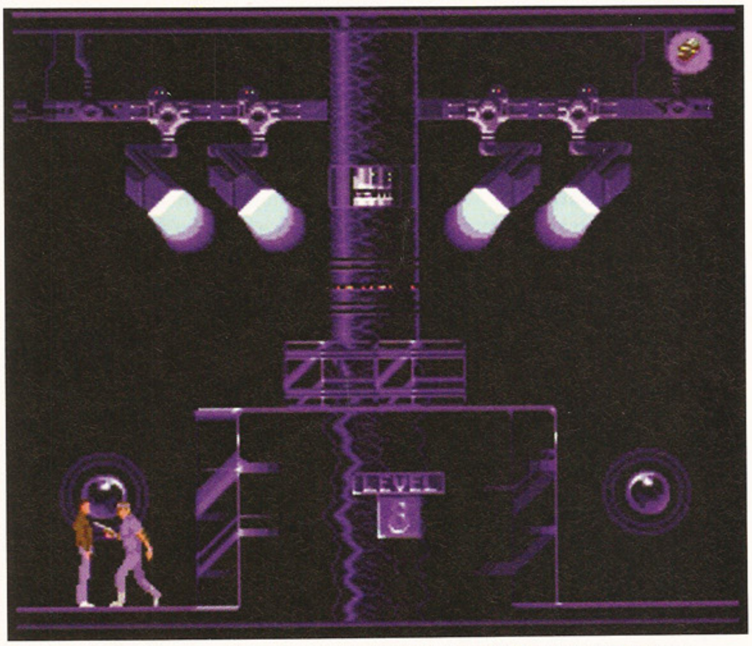


The game starts with you stuck in a jungle populated by mutants with dirty great guns that they like to use on you. Whack 'em before they whack you.

Silky smooth animation and murderously difficult jumps return in possibly the best Amiga game to come across the Channel.

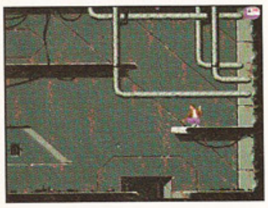
Oh that Gallic flair eh? Ever since our neighbours across the water got on the games scene they've tried to set about proving that it's graphics that count and bugger the gameplay. Obviously they've been wrong most of the time and although they've given us some top looking software, most of it's been, well, limp in the fun department.

Delphine are possibly the most famous French developers who actually believed a little gameplay would make their games more popular. *Another World* became an instant hit on the Amiga because it looked great and played well – while it lasted. Sadly, there still wasn't enough to the game and just as the fun was really starting, it all finished. Then came *Flashback*.



This chap appears to have a problem with you being around. Pull your gun out and off him quickly.

> "...the overall look of the game is tremendous. And this time they brought the gameplay too."



This graphic adventure takes the player around the cosmos in an attempt to expose a mess of aliens living among us and so save the world. Fair enough, nothing strange there really. What makes *Flashback* stand out though are the graphics.

The animation is the smoothest you'll ever see, the player's character has a vast range of moves and though the backgrounds aren't exactly amazing, the overall look of the game is tremendous. And this time they brought the gameplay too.

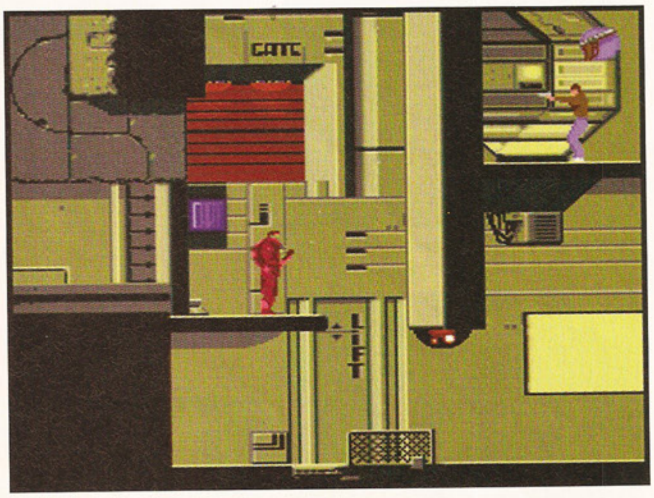
Essentially it's a platformer. Pixel-perfect jumps are only ever just around the corner as you scamper from platform to platform through the game's seven levels.

There's shooting to be done as well because there are plenty of baddies around the place trying to stop you spilling the beans on the aliens. There are puzzles to solve in order to progress and there's a whole lot of fun to be had along the way.

Personally I find the amount of tricky jumps and difficult to hit baddies a little wearing but I know other people who don't think these are a problem at all (Ben Vost, for example). One thing we do agree on is the amount of enjoyment the game gives. The levels are large and complex, and with three difficulty levels *Flashback* will keep you playing for a long, long time.

Though this hasn't got an overly 'adult' theme or anything, some of the puzzles are very devious and will have even experienced gamers scratching their heads and that, combined with the often tricky joystick manipulation required, probably puts this out of the league of younger players.

Flashback has stood the test of time very well and, at the risk of being booed and hissed for being picky, it only just misses out on the Format Gold award as the frustration level is a little too high for me.



One of the best bits of animation is when Conrad whips out his gun and aims. He may be doing it to an unarmed wall above, but hey! He still looks good!

PUBLISHER: Epic Marketing (01793 514188)
PRICE: £14.99
VERSIONS: A1200
REQUIREMENTS: 1Mb
RELEASE DATE: Out now

GRAPHICS: ●●●●○
Marvellous movement, better than average backgrounds – a sumptuous eye-feast.

SOUND: ●●●●○
Fabulous effects help build the atmosphere. Play this with the lights off and the sound up.

ADDICTION: ●●●○○
It's hard so the frustration level's high but the more you play, the more you'll want to play.

PLAYABILITY: ●●●○○
Tricky at times as timing can be vital.

OVERALL VERDICT:
A graphic action adventure, it looks and plays wonderfully. Let it become a part of your life for a few weeks and you won't regret it.

89%

Napalm

WORK IN PROGRESS

A brand new work in progress from the people who brought Myst and Quake to the Amiga. ClickBOOM present Napalm.

At ClickBOOM, we knew that our customers wanted a real-time strategy game from us next. In fact, if you added the amount of votes we got for *Red Alert* and the original *Command & Conquer* together it would have topped our "most wanted" list, so our question was "Should we approach Westwood about a conversion, or should we produce our own game?"

After *Myst* and *Quake* we knew that everyone was expecting another conversion from us, so we thought an original Amiga game would be a better bet, especially since we could learn from the other games that were available and make ours better because it would be an Amiga game.

> **"...we've just upgraded the artificial intelligence of the computer opponent. It's now just as sneaky as a human player..."**

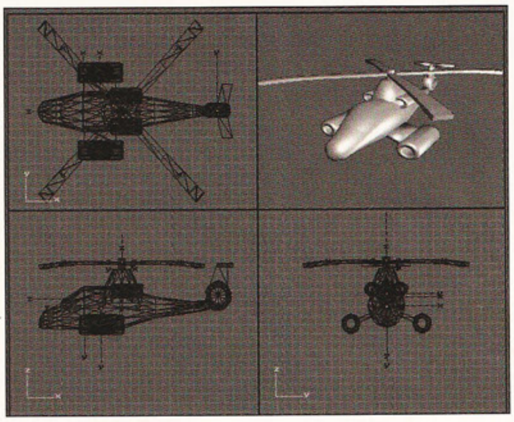
With a game of this sort, building up from starting blocks is easier than having to design from scratch, although we did have to do a lot of the work involved from the ground up, like designing the game's graphic engine. We started with this and worked out how the screen would scroll, handle the mouse and so on, made all the more difficult by our intention to support a wide range of resolutions, from 320 x 200 up to graphics card resolutions.

The next thing that had to be worked on was perhaps one of the most important on a game like this – the "pathfinder" routine.

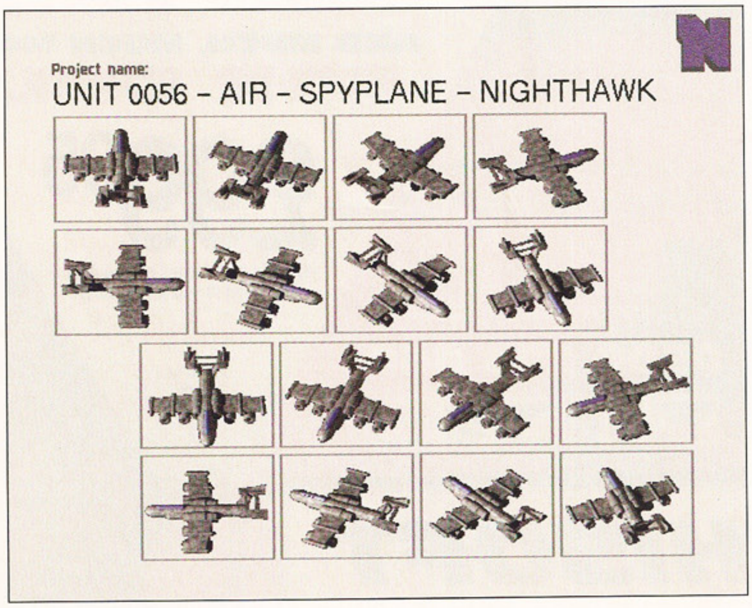
Once this was out of the way, tests with simple graphics (test tanks and helicopters) gave an impression of how the game was actually going to look when it was finished.

One of the next most important areas of designing a game of this nature revolves around the essential scouting and uncovering of terrain common to almost all real-time strategy games. This routine is a lot more complex than many people think, but it's fairly easy when you compare it to the real biggie – artificial intelligence.

The team was split into two to work on the graphics and the intelligence side by side. Up until this point in the game we had units able to "see" the enemy if the line of sight allowed it, and they were directed to fire on these enemy units. However, because there was no AI implemented, it meant



All of the units have been extensively modelled in 3D, prior to rendering frames for animation.



Some completed frames of an air unit show just how detailed the animation will be.

Grouping around in the dark

One of the most important playing features of this genre of games is one that was missing from the original *Dune* games on the Amiga that were the forefathers of the *C&C* games, that of the ability to group units and move them as a whole. *Napalm* offers the player the ability to group units in much the same familiar way as with Workbench – drag a box around a cluster of units to select them all and add more to the group by shift-clicking on troops you want to join or leave the group. Nothing could be easier.

Being able to group troops like this makes the game much easier to handle when you have dozens of units to control and means that you can get on with the tough business of working on your strategy and tactics.



that there was no real gameplay possible. Although by now we had added features like "forced fire" so that units could fire upon their targets even if they themselves were under attack, actual "intelligent" decisions from the computer were not yet forthcoming.

At much work, the computer opponent developed a 'brain'. It wasn't very smart but it was an enemy. Because the AI meant that a lot of other options had to be added at the same time, *Napalm* was now finally playable as a game, albeit one with a pretty dumb opponent.

At this point, more effort was concentrated into getting the game to look, sound and play better. New units had already been added, with graphics for different buildings, units and structures, including the all-important oil refineries which are to be the source of the player's income, enabling them to build other units.

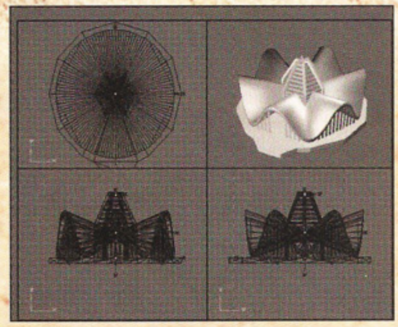
Now that the game was starting to look really polished, it was time to turn to other things.

Everyone knows the importance of network/serial/direct modem play when it comes to multi-player games and *Napalm* is ideal for this kind of game. It's definitely more fun to play with real, human, unpredictable opponents than it will probably ever be against just the computer, so support for multiple machines was added at this point.

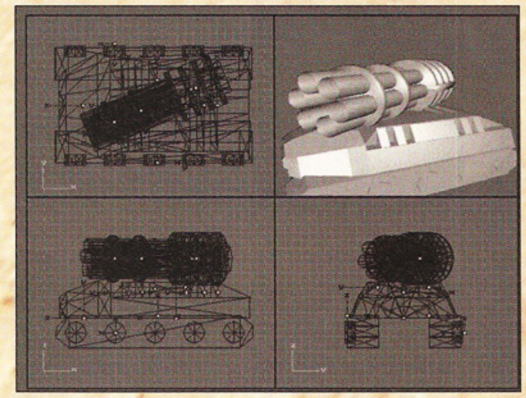
As ever, ideas spark off each other, so further options had to be added to the game at this point for even more fun.

As the game currently stands, we've just upgraded the artificial intelligence of the computer opponent. It's now just as sneaky as a human player and will do all sorts of underhand tricks like faking an attack in order to draw you out, tank rushing and self-preservation – running away if it is really outnumbered or if it is being outgunned.

Right now, we are really happy with the quality of the AI – all that remains is for it to be thoroughly playtested and tweaked accordingly.



As with Dune, C&C, et al, a large selection of buildings will be included in the game.



Here at AF we're not sure what this unit does, but our guess is that you'll want to steer clear of that large tubey thing.

NAPALM
THE CRIMSON CRISIS

Napalm **is expected to be available by the WOA show in May this year and ClickBOOM are ready to take pre-orders now. If you want to get in contact with them, the best way is through their website at http://www.clickboom.com but you can also write to them at the following email address: info@clickboom.com, or this mail address: Box 969, 31 Adelaide St. East Toronto, M5C 2K3 Canada. Their phone number is: +1 (416) 868-6388 and you can fax them on +1 (416) 868-9232.**

CLICK BOOM

Ever wished you'd written 'that' famous novel, or 'that' brilliant pop song? Think you could write a better game than the one you just bought? These people have all had those thoughts and here are the fruits of their labours. They are, of course, the...



Reader Games

ON THIS MONTH'S CD

AFCD26:-ReaderStuff-/-ReaderGames-

You may not be a novelist and you may be tone deaf but the chances are, because you're reading Amiga Format, you know something about Amiga gaming. The likelihood is you know your *Lemmings* from your *Kick Off '97*.

You've probably played a game and thought: "I wish they'd made more of this feature or that feature." If you have had those thoughts, then now's the time for you to do something about it.

The games featured over the next few pages are created by you, the *Amiga Format* readers. They don't come in fancy packaging with posters and badges. They usually arrive in a jiffy bag with nothing more than the author's name and address and sometimes, just sometimes, you can even play them!

We're not interested in fancy packaging here. All we do is look at your homemade attempts to create a good game and offer our help and advice on how you might make improvements to the gameplay.

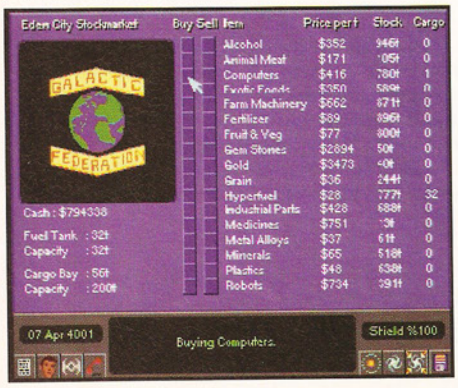
We even manage to resist the temptation to have a good laugh at the really awful ones (most of the time anyway). If you've ever wanted to make a game then now's the time to do it. Get yourself a programming package and let that code flow through your fingers.

You never know, you might even be rewarded for your efforts. Each and every month we give the author of the month's best game a lovely £50 prize. Before you go rushing off upstairs though, read through this month's selection...

GAME: Conflict AUTHOR: Gordon Miller LANGUAGE: Amos Pro

£50 AF Winner!

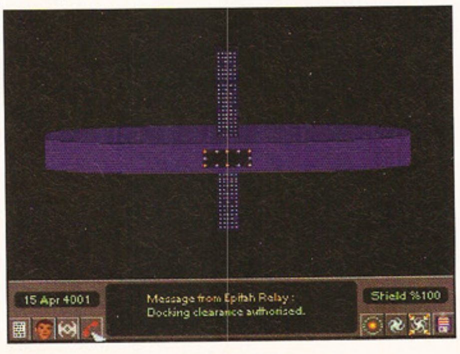
Gordon's been a contributor to Reader Games for quite a while now, only just missing out on the £50 prize a few months ago with his *Federation* game. However, he happened to be unlucky enough to submit it when we had some staggering entries.



It's good to see Woolies managed to survive the Great Price Wars of the third millennium, bar the name changes of course. No Easter eggs either.

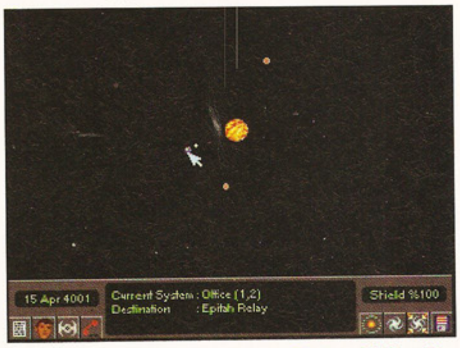
Conflict is essentially the same as *Federation* with a few more graphic additions and game enhancements. What you're actually playing here is a *Frontier* clone but without the flying around bits. There's trading to be done, bigger ships to be bought and loads of pirates to be fought. There are also military and civilian missions to undertake, making this a game that's not only jolly good fun but one that's going to last for quite some time.

The combat is fun to start with because it's nice and simple, you merely have to move a cross-hair around the screen and blast away at the randomly moving enemy ships. It does become a little tedious after a while, at least until you've got a gun big enough to take 'em out with just a couple of shots. I seem to have strayed into Dirty Harry territory here but I think you know what I mean.



Although it's not hugely different from *Federation*, Gordon's taken some of my (and other people's) criticisms on board and has refined the game, making it a worthy winner of this month's £50. It just goes to show folks, there's usually room for improvement.

If you'd like to create something that other people enjoy, then you have to listen to what other people say about your game. Good stuff Gordon, enjoy the prize.



I'm not so sure about space travel. I mean, all that recycled air – what chance have you got if someone's had baked beans the night before?

VERDICT:

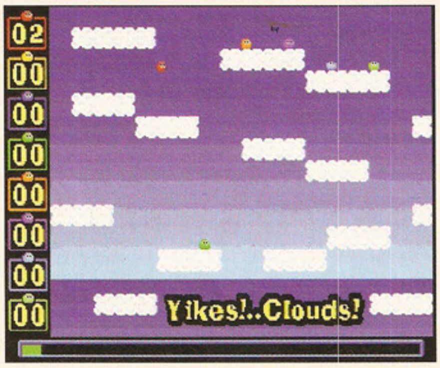
An Elite/Frontier clone that's well put together and enjoyable to play. Although all the ideas in here have been, erm, 'borrowed', it still manages to have an identity of its own. Well worth this month's £50 prize.

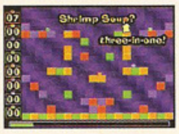
GAME: Blob AUTHOR: David Johnson and Dennis Ng LANGUAGE: Blitz Basic 2

Here's a very simple game that's been given a lot of thought and effort. It's a multiplayer platformer in which each player takes control of a little blob and then has to simply bounce around the screen, attempting to land on the heads of the other players' blobs.

It's fast, it's frantic and it's a lot of fun. The presentation is excellent and David and Dennis have added a couple of extra levels of gameplay as you can score bonuses for three in a row and the like. The result is that it becomes even more manic as you rush about trying to rack up the points while attempting to avoid getting bounced on yourself. There's plenty of variety to the wrap-around levels and controlling your little blob is very easy as you only have left, right and jump to worry about. Neat. Another fine example of a simple idea given the right treatment. Sadly, the fun wears a little thin, even though it is exciting for the first few minutes when you've got all eight players having a go. It could have done with a decent one player mode (which won't happen because David freely admits he wouldn't know where to start when it comes to programming AI routines), but that aside this a well polished distraction. Keep up the good work chaps. AF







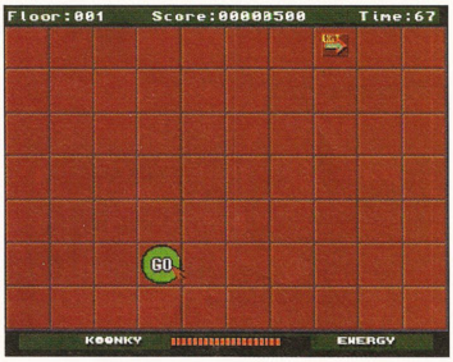
Cheerful looking characters, eh? Mind you it's easy to see why – they're on cloud nine. And cloud ten, cloud eleven, cloud twelve...

VERDICT:

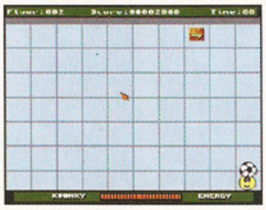
A simple idea that's been well worked. Lacks a one-player mode which is a shame. Get a bunch of mates round and you'll have fun for quite some time.

GAME: Koonky AUTHOR: E. Manzonni LANGUAGE: Amos Pro

Our Italian chum Mr. Manzonni is no stranger to Reader Games having already submitted a couple of notably good efforts in the past. This one's a little out of the ordinary as what you're aiming to do is guide a small smiley face to the exit by following a specific, hidden route. You're plonked on a grid and then by clicking on adjacent squares the route to the exit is gradually revealed.



Of course, it's nowhere near as simple as that. For a start you've got a whole bunch of traps to avoid. There are things that fall from the top of the screen which bounce you back to the start and others that bounce you around randomly (in which case you click on an adjacent square and if it says 'stop' you get shunted back to the beginning square). Essentially it's just a case of clicking on squares, remembering which ones say 'go' and trying to connect them up without getting hit by the numerous and frustrating baddies.



Looks simple but it's very tricky, especially when things drop on you.

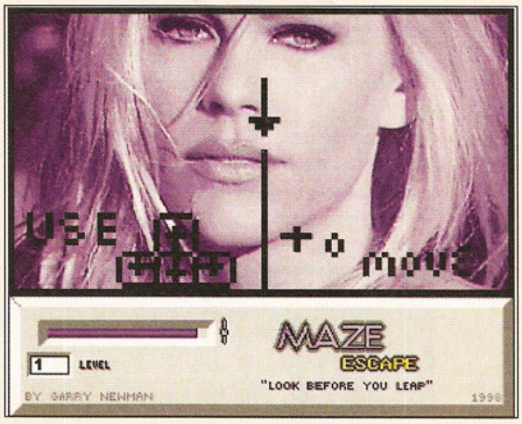
It's not bad. It's not a great deal of fun either, but it works (once you get used to it) and will keep you entertained for a while. If anything, the falling down baddies are just too quick – whether you avoid them or not is largely just a case of luck. It also lacks polish. Compare it to something like *Blob* and you can see what a difference a little effort in put into the presentation can make. An original idea, but not really a finished one. AF

VERDICT:

A simple puzzle-kinda game that lacks polish and any real depth. Entertaining for a short while but it won't blow your socks off.

GAME: Maze Escape AUTHOR: Garry Newman LANGUAGE: Blitz Basic 2

Here's a curious lil' game. You're presented with a series of small mazes that you have to negotiate your way around in an attempt to find Titch the dog. Except you don't actually find Titch at all because you merely find the exit and then have to find your way out of the next maze.

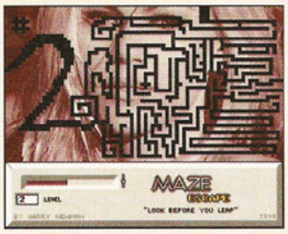


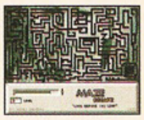
Well, what can I say? It's a find your way out of a maze game. You control your teeny tiny pixel (it's too teeny tiny Garry) using the cursor keys and merely whizz around until you find the exit (which is always in the same place so once you've learnt a maze you simply have to go through the motions when you're playing it again).

Garry's put some nice graphic effects in and the background to the mazes is more interesting than the actual mazes themselves. Although there's a time limit for each maze there's nothing else in the way of baddies and the like to trouble you, so all you really do is spend your time trolling about looking for the exit.

Fail to find it and you lose a life. Lose all your lives and you have to go through the earlier, easier mazes until you get to the one you're stuck on, then it's a case of trial and error until you get to where you wanted to be.

There's little challenge here but at least the game works as it should – it's smooth, fast and all the mazes are different. A lot more is needed to create any kind of excitement though. There just isn't the challenge or interest you'd need to keep you playing for any length of time. AF



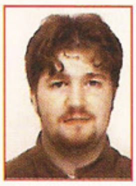


If you used the right pictures I could guarantee nobody would finish the game in time, right Melinda?

VERDICT:

A simple maze game that offers little challenge or excitement. It needs some additions and more imaginative mazes but it's well put together. Keep 'em coming Garry.

GAME: Rhythm King AUTHOR: Will Morton LANGUAGE: Unknown



Here's a genre we haven't seen for a long time at Reader Games, and especially not as well done as this – the management game. You're in charge of a young band and must try to make them as famous as possible by gigging, promoting and getting record deals for them. A top idea, but I think bribes, punch-ups and embezzlement should get a look in somewhere.

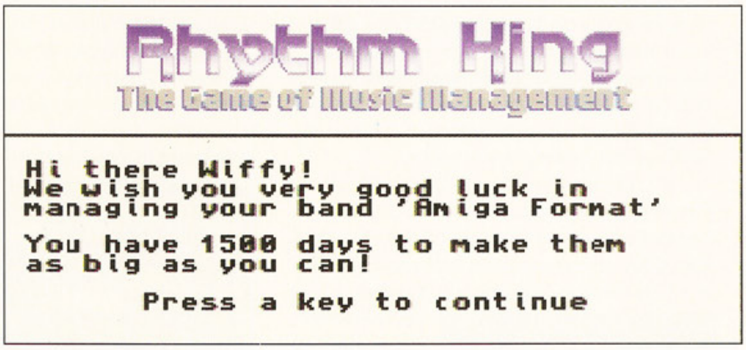
It's terribly simple to play as all you have to do is select what you want to do from a short, (to start with), list of options. You want your band to perform a gig? Fine, just decide where (their options will be limited by their popularity) and tell 'em to do it. As your band grows in status, so will their fan base and the amount of money you'll be able to command for each performance.

Then you've got to worry about keeping the band happy (buying beer usually does the trick), replacing their equipment periodically and going on profitable tours.

It's fun to start with but the limited options dulls your enjoyment. All it needs are a few more surprises. Naming your tracks is a nice idea, especially when your single enters the charts at number one!

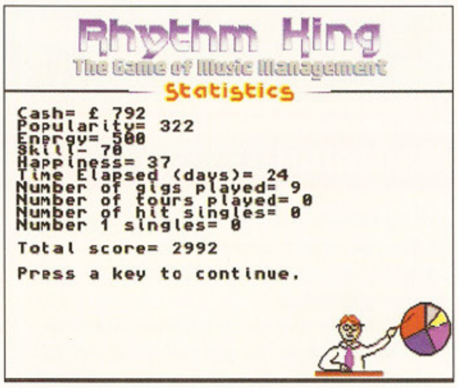
Rhythm King's a nice game. It's not tremendously exciting, but like all resource management games can become very addictive. More twists and turns on the way would have improved it markedly.

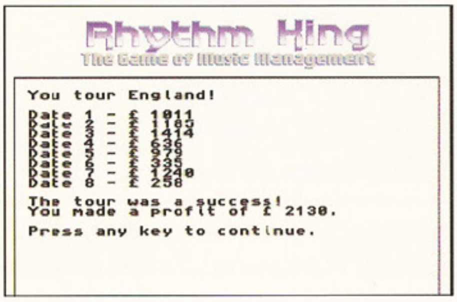
A good giggle and the only way Peter Andre will ever make it to the top.



What did you think of the game, Noel? Are you listening Mr. Gallagher?

"Eh, wot? Yeh, yeh. Mad for it me, mad for it. It's like socio-political commentary on the state of the music industry, innit man? Wicked! Yeah."





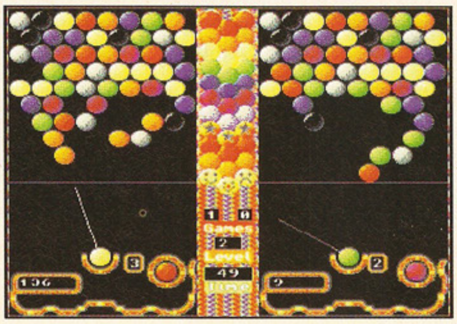
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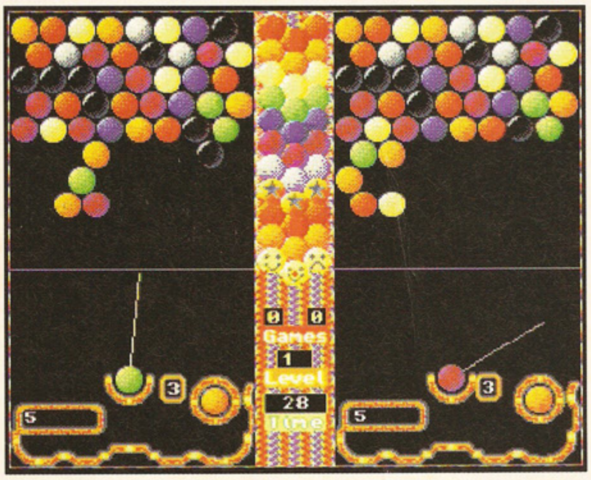
A simple management game that's about a fun subject and is fun to play. A few more surprises on the route to stardom would have made it even more enjoyable.

GAME: Burst a Marble AUTHOR: David and Philip Ball LANGUAGE: Blitz Basic2



One of the best console titles to appear in recent years was *Bust a Move*, a simple puzzle game in which you fired bubbles up the screen in order to get three of the same coloured bubbles together, which would get rid of them from the screen. Here's an Amiga clone of that game.

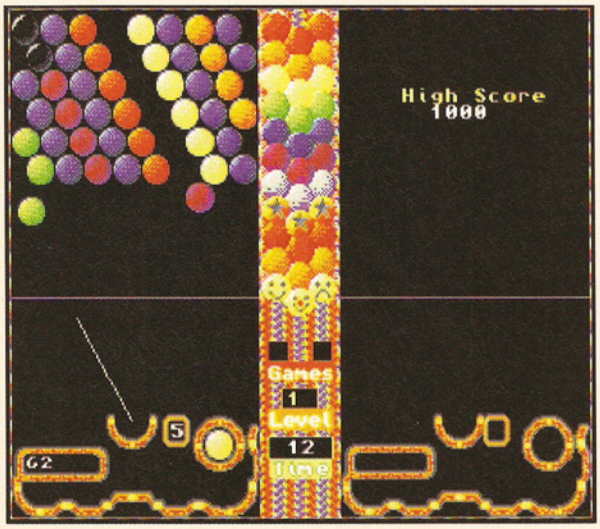




And what a little cracker it is, despite the rather awkward interface on the options screen (when you're deciding how many rounds you have to win to be declared champ), which uses the mouse clumsily. *Burst a Marble* is sweet. Use the joystick to control a direction indicator and "fire" to shoot marbles up the screen. The idea is to clear your screen before your opponent or hope his fills up before yours.

Thankfully the game's got a fab one player mode, but with two of you going for it you can't fail to have fun with this one.

It's cheery, bright and colourful and, despite the smoothness not being everything it could and the rebounds off the sides of the screen being a little iffy, it's got all the addiction of the original. That means it's one of the most competitive games around. Not a lot more I need to say about *Burst a Marble*. Play it, you'll love it.



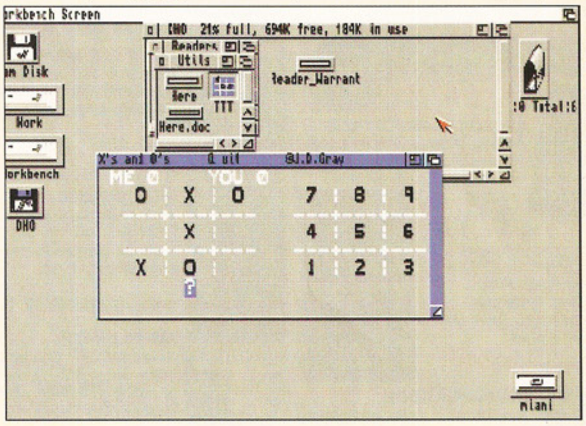
Once upon a time there was a child with a catapult, a marble and an industrial strength rubber band. Oh yes, and a window. Oh dear.

VERDICT:

A fine Bust a Move clone that's splendid fun to play (especially in two player mode). You can't fail to be glued to this for ages.

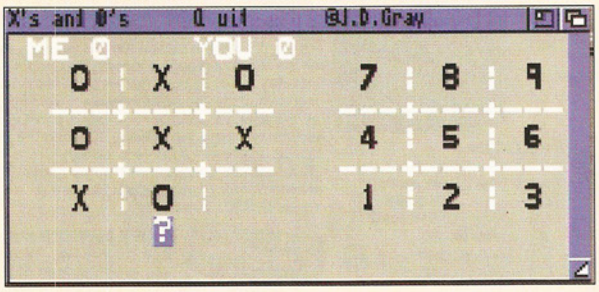
GAME: X's and O's AUTHOR: John Gray LANGUAGE: Amos Pro

Well it's noughts and crosses innit? You bet it is. And a very simple version it is too. Two grids are presented to you. One contains nothing and the other contains numbers that correspond to the empty grid. For example, suppose you want to put an X in the middle square you'd hit the number five key and an X appears in the centre square of the previously empty grid. Got the picture?



Despite the fact that it's fast, it's not the best noughts and crosses game ever. Having to use keys to enter your selection is tedious. Simply clicking on the square with the mouse would have been a lot easier. Although the program knows how to play, it follows the same route game after game after game, so if you know how to win at this then there's no way you're going to lose. However, if you don't it's going to punish you again and again.

This is a prime example of how not to present a game. If your game's going to be simple and easy then at least spend some time and effort making it presentable and as easy as possible for the player to use.



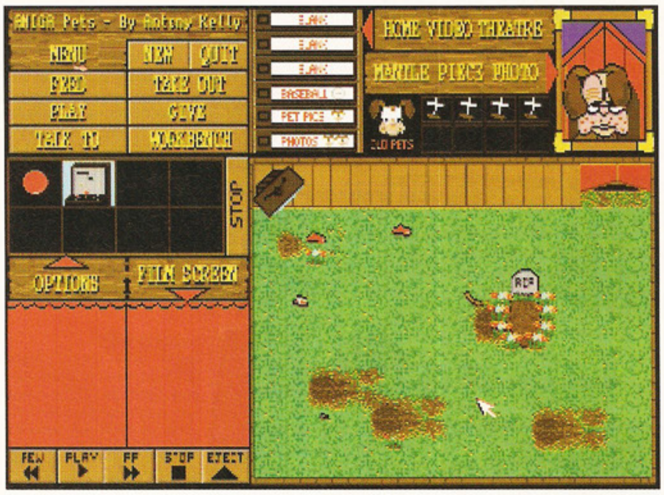
Noughts and crosses. A simple self-explanatory name, so why do the Americans persist in calling this ancient and honourable game Tic-tac-toe? What does it mean anyway, minty foot sweets?!

This, however, is a simple game that's more complicated to play than it should be. The author seems to have given little consideration as to how everybody is going to interact with it. Disappointing.

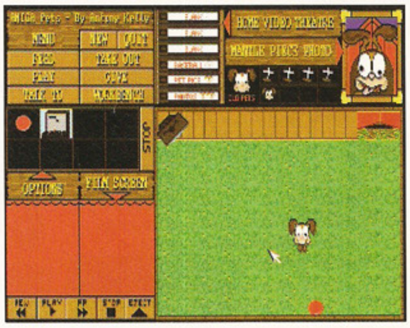
VERDICT:

Noughts and crosses that's made more complicated and unplayable than it should have been. The only advantage this has over playing with a pencil and paper is that you don't need a mate to play with.

GAME: Amigapets AUTHOR: Anthony Kelly LANGUAGE: Blitz Basic 2



And to finish us off this month, here's the last Tamagotchi clone you're going to see in Reader Games. No, really. At least this one's half decent and it's actually got more to do with the PC pet game *Dogz* than with a Tamagotchi.

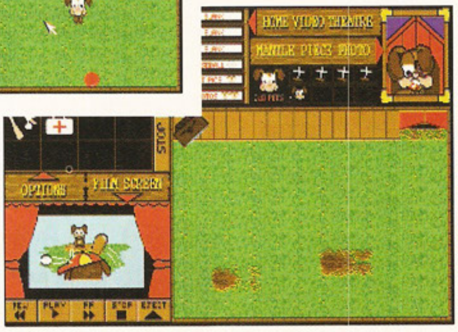


You can see your little pet scampering around the screen, digging holes here and there, chasing after balls when he's playful (if he can't be bothered to play *Pong* on his little computer that is) and generally acting more like a pixillated pet than just an amorphous bunch of bits.

There's plenty of grub to give him, loads of toys for him to mess around with, including a TV for him to watch, and, bizarrely, there's a home video theatre and a whole bunch of photos of his family to look at. I don't know about you but I don't ever remember taking my pet dog to play baseball and then getting the whole family to watch a video of the game. Still, it takes all sorts I suppose.

Amigapet lacks sound which is a shame because the wacky animations could do with that little bit of spicing up, but overall it's a fun virtual pet. Please though folks, don't bother sending in any more Tamagotchi clones. I'm sure I've said this every month for the last three at least, but I just won't bother loading them up. And I mean it this time.

"You ain't nothing but a hound dog, dying all the time. You ain't nothing but a hound dog and you ain't no longer a friend of mine."



VERDICT:

More of a virtual pet simulation than a straight Tamagotchi clone and quite a good one at that. Your pets don't live for long but they're a giggle while they're alive.

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UFO: Enemy Unknown TIPS

When we gave away the fabulous *UFO: Enemy Unknown* last month we knew we were giving you a challenging game. *Amiga Format*'s top UFO expert, **Andy Smith**, offers some thoughts and tips for those of you struggling to repel the alien invasion...

MANAGING YOUR BASE AND MONEY

The first thing to do is put your first base in the middle of a large land mass – Russia is good. That way the chances of you intercepting and forcing UFOs to crash land into the sea, and therefore be lost, is significantly reduced.

The next thing to do is to add another laboratory and workshop and living quarters to your base. You might want to think about an alien containment unit too, though this could wait for a couple of months.

Now you should hire a lot more scientists and a few more engineers. Get the scientists working on the medi-kit immediately (never bother with the motion scanner because it's a complete waste of time, effort and money) and then let them research whatever comes next on the list.

> “When you do close in on a slower alien craft, switch to standard attack and leave the rest to the pilot.”

Although it sounds daft, the next thing to do is build a small base somewhere else. All you need is an access lift and some living quarters at the moment because the trick here is to switch to 5 second mode just before the end of the month (don't start any research in the last week of the month) and then transfer all your scientists and engineers to the new base – that way you don't have to pay 'em. Once you're in the new month, transfer them all back and start researching again (tee hee).

Every time you get a message telling you there's an alien ship, ignore it, at least until you've researched and manufactured laser rifles. This doesn't make you very popular with the people paying you, and your funding suffers for the first couple of months, but it does mean your team members have a much better chance of survival once you do go into combat.

As soon as you recover some alien alloys from a crash site, research them because they're the key to personal armour and, later, the even better power suit. Don't bother wasting valuable research time on items you're not going to use. Sure, you need to research laser pistols before you can research laser rifles and laser cannons, but if you bring home a plasma rifle and a plasma pistol, don't bother with the pistol because you're not going to be using it.

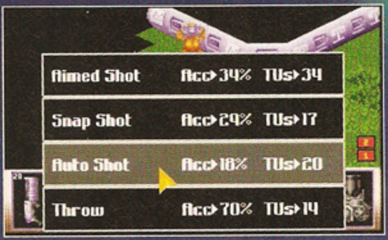
When funds are getting low (and they probably will, to start with at

Go for the standard attack if you only want to down the enemy's craft and not destroy it.

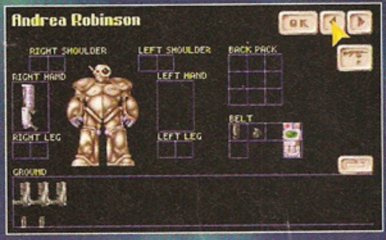








The accuracy percentage may be low on Auto Shot, but at least you get three chances to hit.





least) the best way to make some cash is to sell off any alien artefacts you discover. You only need one alien propulsion system for your scientists to research, so if you've got eight of the things then sell off the other seven.

The same thing goes for alien dead bodies (and live ones if you've managed to stun 'em and stick 'em in your backpack – see later for more info on this). NEVER sell your Elerium 115 though, because you can't make it and you'll need it to manufacture some useful items later in the game.

There's never any need to build new hangars at your first base and there's little cause to build a new transport ship at any other base, except when it's on the far side of the world.

INTERCEPTING ENEMY CRAFT

First of all, change the ordnance on one of your Interceptor craft from Stingray missiles to Avalanche missiles. This lets you go after craft and destroy them, rather than getting them to crash-land. It doesn't earn you a lot of points but it pleases the countries who are sponsoring you.

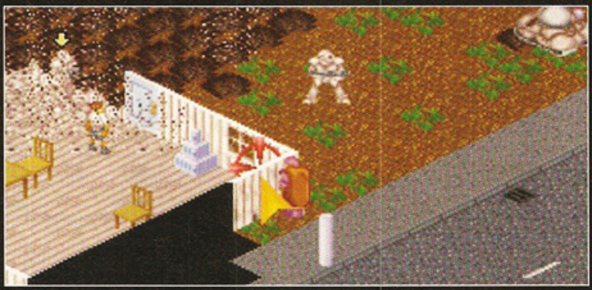
Suppose you do want to make the alien craft crash-land. For a start, don't bother going after any craft doing more than 1,000mph because you'll never catch 'em until you've researched alien propulsion systems.

When you do close in on a slower alien craft, switch to standard attack and leave the rest to the pilot. If things start to go pear-shaped, you could be taking on a craft that's just too large and powerful for your Interceptor. If this is the case, you should disengage and return home for repairs.





Research is the key. And now you can get away without having to pay your scientists!



Blast through the wall and then you'll be able to get a clear shot at the alien hiding behind it.

You are going to have to go after larger craft and your best chance of downing them is to go in with an aggressive attack right away. If the first couple of avalanches miss, disengage – if the aliens start shooting back then the chances are they're going to wipe you out pretty quickly.

MANAGING YOUR TROOPS

Before taking on your first mission, check your troop roster. There can be a huge difference between the troops when it comes to things like firing accuracy and reactions. Pick your squad from the best available. The next thing to do is buy yourself a tank. This sits at the back of the transporter and is therefore first off the ship.

As the tank can withstand a couple of hits before exploding, it's always useful to have because it can be exited first and therefore draw any opportunity fire the aliens may have waiting for you as you disembark. Better to lose a tank than one of your troops who has worked their way up the ranks!

Remember when you're equipping your men to put anything they might need in their belts if possible. This is because it takes up fewer time points getting things out of the belt than out of the backpack or wherever.

Also, try to use Auto Shot if your weapon's suitable – it may not be terribly accurate, but with three shots each time, the chances are you'll hit what you're aiming for.

Now then, there are two main battle zones and we'll deal with them in turn in the boxouts below.

CRASH SITES

Take care when exiting your men from the transporter. Move them to the back before giving them an objective on the ground as they do have a tendency to wander back up the ramp if you're not careful. As a general rule, exit the chaps on the left out of the left side and the chaps on the right out of the right side. Your first unit off the transporter should ALWAYS do a 360° spin to make as much of the surrounding countryside visible as possible.

Because you're going to use up a fair bit of time getting your troops off the transporter, be aware that they can be a bit bunched up on the first turn and this leaves them very vulnerable to grenade attacks from the aliens.

Be especially aware of sites that have hills and dunes because the aliens do like to wander around outside and hide in the terrain.

When entering the spaceship, make sure your men are on full time points and make sure they enter in pairs. The aliens have a tendency to pop out and take cheeky shots at you so make sure you've got your people aimed towards the door and that they've got enough points for some opportunity fire. As Nick mentioned last month, getting your men to crouch whenever possible is good because it makes them a smaller target and increases the accuracy of their shooting.

When dealing with large, multi-layered spaceships, be aware that rogue aliens can suddenly appear from the lifts, so don't keep any of your troops with their backs to the lifts!

If you get the chance, and this is probably best done when you're at a small crash site, get the troops that aren't going to be assaulting the actual spaceship to use up as much energy and timing points as possible, either by running around or by firing. Firing practise gradually increases the skill of your troops and running about increases the number of time points they get on subsequent missions.

TERROR SITES

These are always harder than crash sites because the aliens do tend to be all around the place. Often – and this goes for crash sites too – if one of your troops can see an alien then the others can too, even though it doesn't say so on the screen. For this reason, you should always target any aliens you see with all of your troops.

Sometimes you're going to be able to spot aliens inside houses and shops but not actually have a line of sight to them. Simply take out any walls between you and the baddies, but remember you're going to want to kill 'em off this turn and not do all the hard work for them, letting them have a clear shot at you when it's their turn.

All sorts of nasties lurk at terror sites, especially Chrysallids. These things turn the civilians into monsters at the slightest touch (the same thing happens to your troops too, so don't let 'em get close) and can be a real pain.

Never move your troops around together. No matter how tempting the idea of concentrating your fire is, the danger from grenade and mine attacks is just too great.

For all occasions though, caution is your best friend. It's much better to take another turn and have loads of time points available to you than to try to get it all done at once and lose half your squad.

CHEAT

For those of you who are confident enough to play around with files and stuff, you can try this cheat:

After playing the game for a while, having built up your stores, save your position. Now quit the game and go into your current save game directory and make a copy of the base.dat file. Boot the game up again and sell everything you have (not ships or people, though) or transfer them all to other bases.

Now save again and quit. Next, replace the base.dat file with the copy of the original that you made earlier.

Now when you go back to the game you'll have all the money from the sale, plus all the equipment you sold, and if you transferred anything then those items will arrive shortly.

You can repeat this process as often as you like. Yippee!

GameBusters

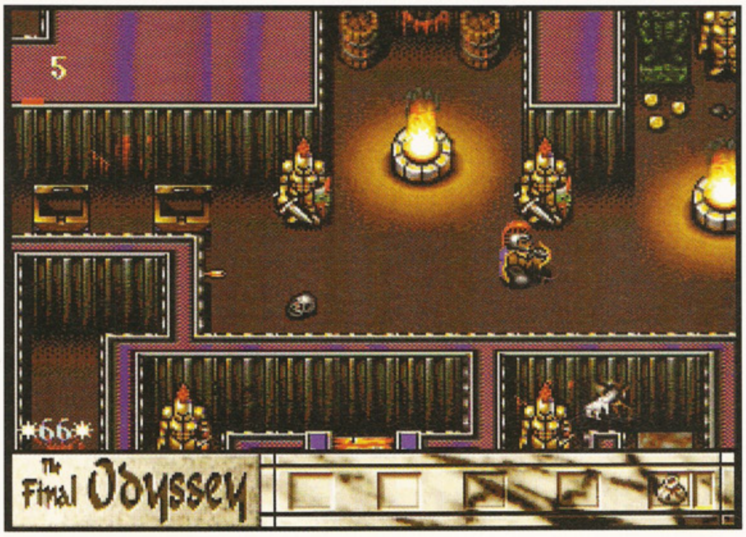
Final Odyssey part 2

Continuing his lifelong mission to bring everyone the best there is in Amiga gaming, Andy Smith divulges those cheats, hints and tips to help you through the hardest parts of the hardest games around.

LEVEL TWO

Thanks to last month's guide to the first part of Vulcan's excellent isometric puzzle/adventure game (*AF106* 88%), you should now be salivating wildly at the chance to get stuck into part two. So without further ado.....

> **Destroy the cracked walls between you and the treasure and collect all the money... Who says crime doesn't pay?**

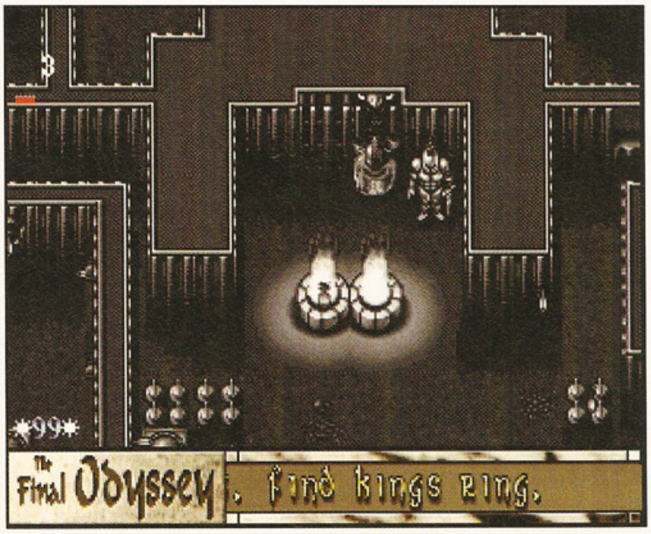


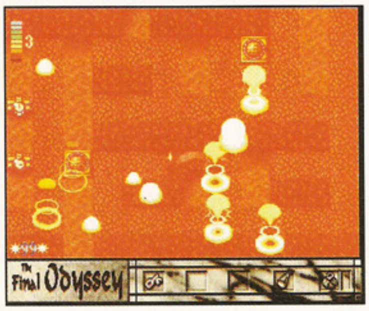
OK, so maybe the guards couldn't fight their way out of a wet paper bag, but they can make a decent fire.

▼ Step on the pressure pad at the bottom right of the arena. Go back to the left and take the bottom exit. Join the one way path and collect the key there before taking the other path to the money and picking it up. Leave here by the left exit.

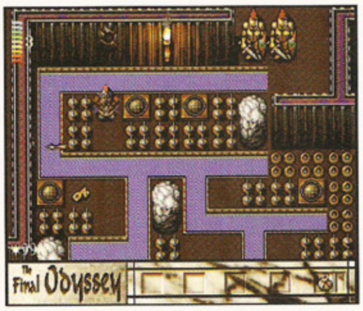
▼ Take the transporter at the bottom left to collect the pickups in the bonus room and then return. Now chat to Griffin who will give you a gob-stopper. Go to the top and take the left exit. Then make your way through the maze, taking care to avoid the rolling boulders. Collect the money at the top left of the arena and return to the previous arena where you found Griffin. This time you should take the top exit.

Darkness falls leaving our hero sharing a campfire with a stranger. "Fancy a marshmallow mate?"





It's very strange but I can't look at this screen shot without thinking of Apocalypse Now. I wonder why.



The Blue Danube ,as Strauss would have seen it had he played Final Odyssey.

▼ Get past the random arena by bumping off the monsters and leave by the exit at the top. Quickly go left to avoid the homing domes. Drink the invincibility potion, polish off the domes then step on the pressure pad and the wall will open.

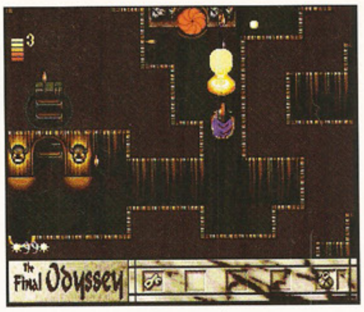
▼ Give yourself a big pat on the back and go through the wall. Use a bomb to destroy the cracked wall there and walk through the gap. Blow up the other wall which you'll find down on the bottom right. You will see nine pressure buttons on the ground here.

▼ Make use of your rippling muscles and push nine stone columns onto these buttons. Once you have, the picture on the left hand side of the arena will unlock, allowing you to reach the exit. Push each stone column through the middle gap in the wall and downwards. Cover the pressure buttons on the side first but be careful to leave the middle vertical row until last. If you don't, you're going to find yourself trapped for all eternity. Trust me on this.

▼ Go back and push the picture on the wall. The wall will slide into the ground allowing you to take the left exit. Now push the stone column down and to the left so that it is sitting just behind the pit. Take the transporter into the room with the pressure pad and step on it. The wall disappears and you can push the stone column into the pit.

▼ Take the transporter then push the four stone columns so that the images on top of them fit together to form a square. Once the puzzle is completed, the image formed is the path you must take to the next arena. Easy really, I remember doing that one for my 11+.

▼ Take the transporter back and make your way up to the top left of the arena. Collect all the money you find along the way. Take the left exit.

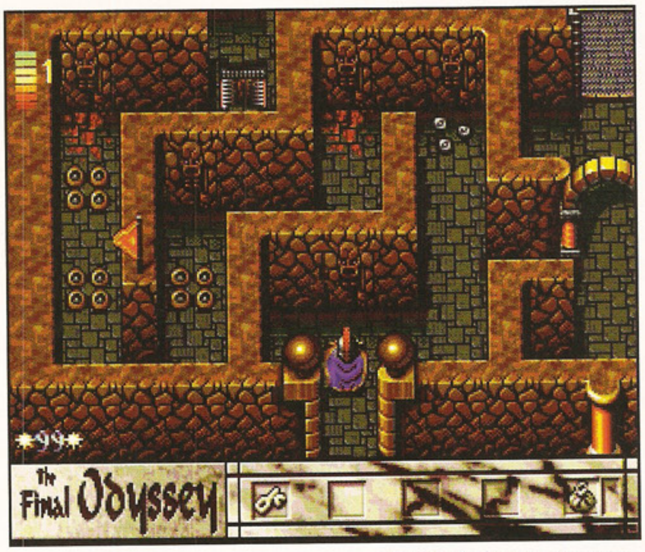


▼ Go down through the automatic doors and you'll find a room full of tiles. Some will fall when you step on them and some won't. Follow the path you learnt from the previous arena (start on the second tile from the left) and walk two down, three right, three down, two left, one up, two left and three down. When you've finished playing hopscotch, go to the top to collect the money and take the bottom exit.

▼ Collect all the items in this arena and then go to the bottom right. Open the iron gate with the key and take the bottom exit where you'll find yourself in the King's Treasury. Time for a little breaking and entering.

▼ Destroy the cracked walls between you and the treasure and collect all the money (don't forget the underground area). Your money bag should now be full so take the exit on the right. Who says crime never pays?

▼ Knock out the dome with the spinning spheres, collect the key it leaves behind and take the right hand exit. Give your hard-earned dosh to Gorland and he'll give you an orb. No discounts for forged student cards here. Now the only way to get to the other side of this arena is to take the stairs going underground and pop up on the other side. When you do, step on to the transporter. You will be sent to a room full of transporters. Take the one on the bottom right. Go to the top and collect all the money there before returning to Gorland and taking the left hand exit.



When you're down to your last life and you can't remember where you've been, bloodstains can be very reassuring.

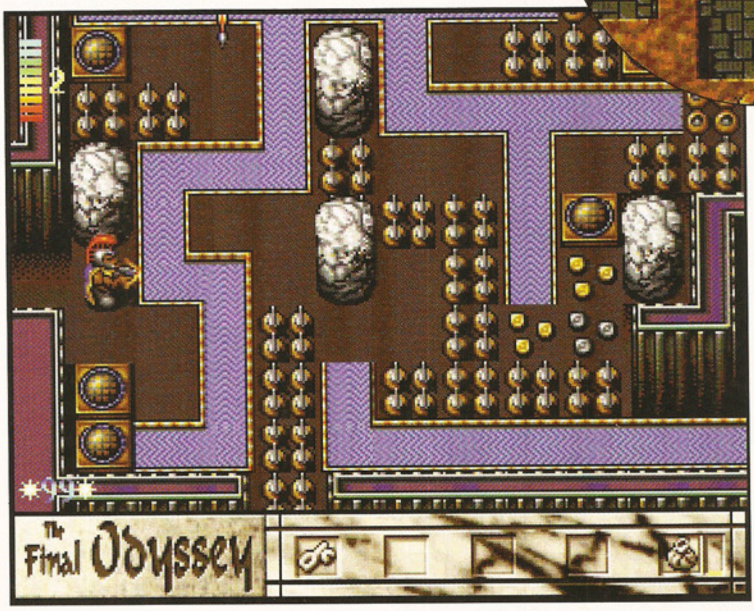
> **"Give your hard earned dosh to Gorland and he'll give you an orb. No discounts for forged student cards here."**



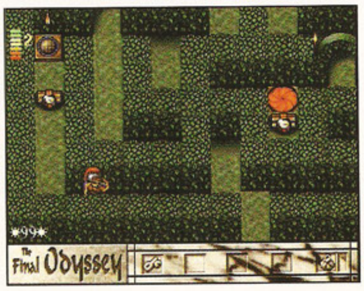
▼ Collect all the money that you couldn't stuff into your pockets before and take the left exit into the King's Treasury and do the same. Now take the right exit and go down through the arch and open the door with a key. Leave via the bottom exit and destroy the life stores to gain extra lives. Use the orb to free the girl from the prison. ('Ello luvly, what's a nice girl like you doin' in a place like this, eh? Hur, hur.)

▼ Take the bottom exit and you'll find a combination switch. Press the first and last switches, then go down and press the

continued overleaf ➡



I have to say those boulders look horrifyingly familiar. Nah, they can't be. Erm... where's the toilet brush?



Rather a suspicious shape for a hedge, don't you think? I don't trust these right-wing gardeners.

Helping Hands

FLASHBACK

Dear AF,
Could you please help me on Flashback? I'm completely stuck on level two.
Fred Fulford, Nottingham.

Certainly can Fred. Here are some level codes that you can play around with:

EASY MODE.

Level1	BACK
Level 2	LOUP
Level 3	CINE
Level 4	GOOD
Level 5	SPIZ
Level 6	BIOS
Levle 7	HALL



Cheat your way through Flashback with our superb, erm, cheats.

NORMAL MODE.

Level 1	PLAY
Level 2	TOIT
Level 3	ZAPP
Level 4	LYNX
Level 5	SCSI
Level 6	GARY
Level 7	PONT

DIFFICULT MODE.

Level 1	CLOP
Level 2	CARA
Level 3	CALE
Level 4	FONT
Level 5	HASH
Level 6	FIBO
Level 7	TIPS

INDY JONES FATE OF ATLANTIS

Dear AF
Help! I'm in the canals and have all the parts to make the machine that will free Sophia except the spoked wheel. When I go and get it, I get stuck in the Sentry room which is a dead end. Can you help?
Derek Jackson, Buxton.

Sorry mate, you're going to have to backtrack. First, use the bread with the cold cuts to make a sandwich and use this to bait the rib cage and drop it in the Crab room to catch a crab. In the lava room, use the cup with the pedestal and statue's head with the plaque. Take the cup of lava you collect back to the ➡

⬅ switch on the right. When the maze has transformed, step on the pressure pad at the top and return. The wall disappears so walk through it and press the switch on the right hand side. Take the bottom exit.

▼ Free the girl by walking through the tunnel and collect the money on the way. Use the top exit to go out. Press the switch again and go up and to the left to take the bottom transporter. Hit the switch in the little room here and leave by the left hand exit. Collect the two keys in the chests and take all the cash. Take the bottom exit. Go through the automatic doors and nuke the two damaged walls there. Vandalism or D.I.Y, you decide.

▼ Move the rock to the side and press the switch it was covering. Collect all the goodies and your money bag should be full again. Hooray! Go all the way back and visit Gorland and give him your money bag to collect another orb. Boo!

▼ Once you've got it, make your way back to where the first girl was imprisoned and take the bottom exit. Take the left exit in the next arena and then the top exit where you'll find the second imprisoned girl. (Sisters apparently, reminds me of some twins I once knew...)

▼ Free her and take her to the tunnel where you'll be transported back to the beginning of the level. Take the one-way path down to the bottom. There's another one-way path here along the bottom that you can't reach because there's a boulder in the way. Push the boulder to the right. Get on this new path going right and keep the joystick pressed forwards because you have to get off the path before you reach the trap at the end. Move it soldier!

▼ You'll now find three one-way paths going upwards. Take the one on the right and leave by the right exit. Waste the homing domes and collect the key. Be careful to only open the door on the right. Go through it and push the boulder out of the way. This reveals a switch so push it. All the doors are now open, leaving more money! Go back and push the switch at the top right of the arena and leave by the top exit.

▼ You're now in the Trophy Room. Smash all the mirrored spheres by using your trusty crossbow. Push the painting on the right to make it disappear, move upwards and leave by the top, right hand exit. There are two boulders at the top. Shove the left boulder down 'one', heave the right boulder 'two' left and down into the first pit. Push the other boulder left and into the second pit.

▼ Go through the doors and collect all the food. When you've picked it all up, lob a bomb at the cracked wall in the bottom right corner. Above the wall that you've just destroyed is yet another boulder. Push this down through the now open wall and into the pit. Leave by the bottom exit.

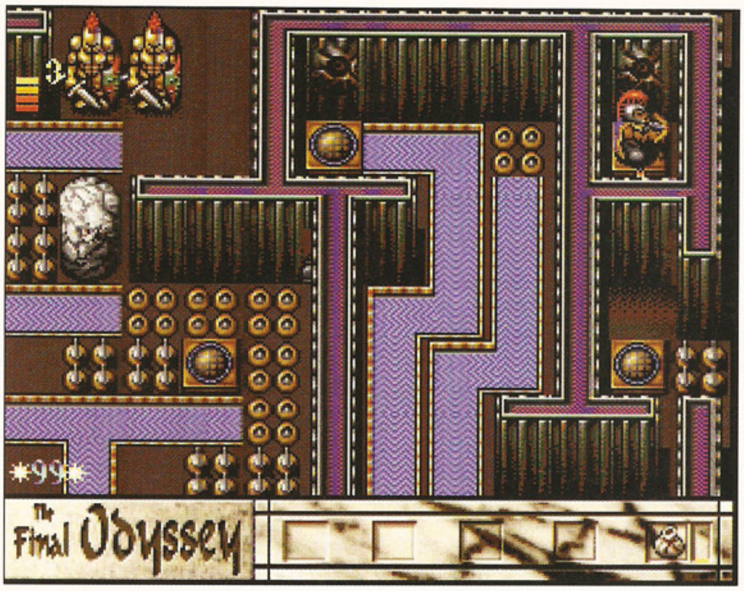
▼ Descend through the flamers, step on the pressure pad and the wall will turn into a mirror. (Someone strikes me as a being a little vain.) Walk through the mirror, take the trans-porter and then take the bottom exit. Butcher the guards and cross the maze to the bottom exit.

▼ Now then, this a tricky one so pay attention! There are three pressure pads below you. Walk down over them and you'll see the wall disappear and reappear. Walk back over them so that the two walls separating you and the transporter are gone. Take the transporter, step on the pressure pad and return.

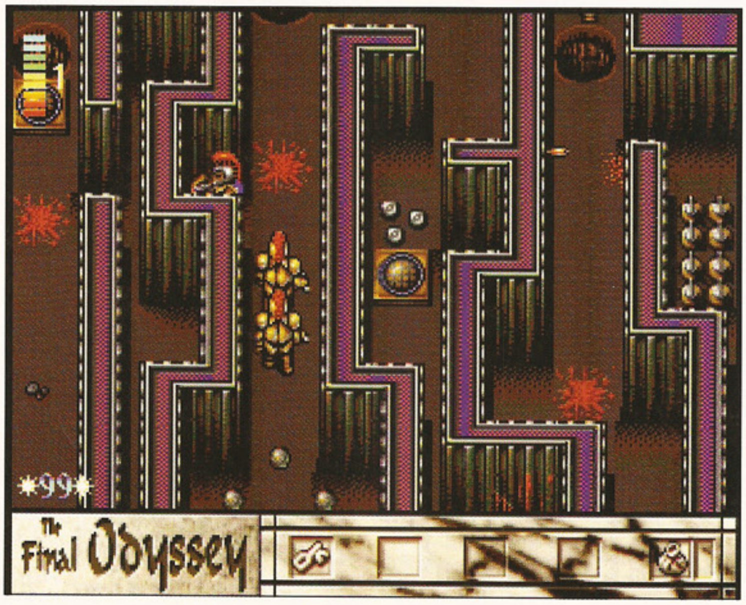
▼ Go up and step on the pressure pad to open the wall and walk down to the spikes. Step over the pressure pad twice. You will now be able to reach the bottom exit. However, if you want to get the bonus items, step on the pressure pad near the exit and go back to the three pressure pads where you started. (You have my permission to be confused.)

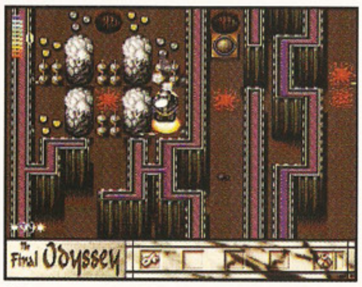
▼ The top one of the three opens the wall at the top left of the arena. Go to the top left and you'll now be able to step on the pressure pad there.

▼ Once you've done all that, go back right to where you'll now be able to walk below to the bottom pressure pad. Step on it. A wall will disappear

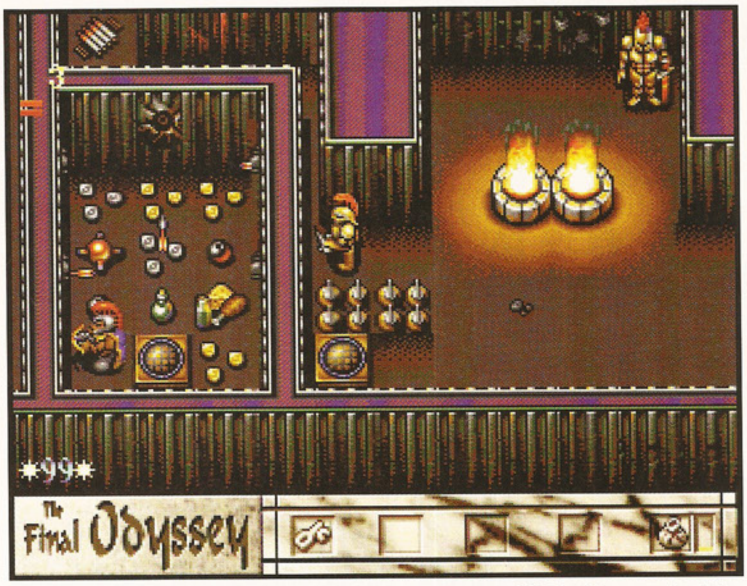


If you look at the picture really, really carefully you can just see the guards sharing a small roll-up.





Kids – never, ever light a match if you smell gas.



Nobody had ever given Hercules a Christmas stocking before. Such beautiful gifts. Ooh, a morning star!

on the right. Go through it and collect the chain gun there. Sorted.

▼ Step on the two pressure pads here and you'll now be able to collect the key above you as well as the food and the chain gun at the top. Leave through the bottom exit.

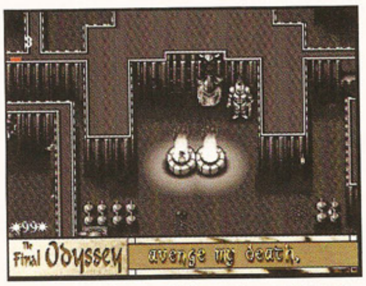
▼ Go down to the four transporters. Take each transporter in turn and step on all of the pressure pads. Use a bomb on the cracked wall on the far right and then head down to the exit on the left. You will now be in the guard room.

▼ Gun down the guards and take the left exit. Push the switch, then walk to the top and push the switch on the top wall. Toddle on down and step on the pressure pad at the bottom. Now press the same switch again and the one just below that. Walk down and step on the other pressure pad.

▼ The two walls to the right should now have vanished. Go up and press the last switch again. Walk back down and press the first switch you used. You can walk up and press the switch on the top right now, so do that, step onto the pressure pad and then push the same switch again.

▼ Hit the first switch you activated when you arrived in the arena and walk through the maze to reach a new switch. Press it and then go right. Press the other switch there.

▼ Step on the two pressure pads to remove the two walls on the left.



Why am I getting one of those deja vu feelings?

Return and walk through the two walls and activate the switch on the left of the arena. Use a bomb to destroy the damaged wall and collect all the bonus items. Make sure you collect the King's key. Go back and take the right exit to the guard room. Take the top exit once you get there.

▼ You can see the Gatekeeper to your right (he's the green transparent thing), but take the transporter to the top. Go to the right, step on the pressure pad and return. I strongly advise using a bomb to kill the two tough guards protecting the Gatekeeper. You should now take the transporter to the Gatekeeper's room and talk to Naga. Give him the King's ring and then take the top exit.

▼ Traverse the random maze in the usual manner until you find a combination switch. Push the second and fourth switches and the wall below will vanish. Take the one-way path and leave by the left exit. Use the key to open the iron gate and then walk to the far left where a guard will have been activated.

▼ As you can't reach the pressure pad above, you must make the guard step on it for you. Move right and the guard will come down the one-way path. Move back and he will step on the pressure pad. Quickly walk through the mirror and take the bottom exit.

▼ Smash the mirrored spheres in the arena. Take the transporter, blow up the damaged wall and push the two boulders on to the pressure pads on the floor. Heave the other boulder into the pit above. Roll one of the two boulders here onto the pressure pad at the top and return.

▼ There should now be yet another mirror at the bottom left of the arena. Walk through it. Open the wall with the picture on it. If it doesn't open then you probably haven't destroyed



Call me conservative, boring and dull but I don't think a house looks right with craters in the floor.

all of the mirrored spheres. Take the left exit here.

▼ Go to the top and push the third switch. Walk down to the left and take the transporter. Stop the lava coming out of the minotaur's head by pushing the gob-stopper you have into its mouth.

▼ The lava will solidify, so walk down and push the switch, then nip through the bottom exit. Step on the pressure pad at the bottom right of the arena. Walk up, take the transporter then jump on all the pressure pads. You can now go into the room with the flying arrows. Blow away the homing dome and collect the key which it leaves behind. Open the iron gate and take the bottom exit.

▼ Make your way to the left, killing as you go. Step on the two pressure pads in the top left of the arena. Go back and take the right hand exit.

▼ Eliminate the homing domes, collect their keys and exit on the right. Make sure you step on the first pressure pad that you come across two times. In this room of 'rock' you'll find the rolling stones no less. (Sorry, I couldn't resist it.)

▼ Stand on all the pressure pads except for the middle one. Go down and to the left and you'll find two more pressure pads here. Step on both of them. You should be able to reach the right exit so push the boulder out of the way in order to reveal a keyhole.

▼ Open all the doors, walk to the bottom and bomb the damaged walls. Push one of the boulders onto the transporter where it will be transported to the one above.

▼ Push the same boulder onto the right hand transporter, then go back and take the transporter on the far left of the arena. Roll the boulder one down, one right and then down again into the pit.

▼ Repeat the manoeuvre to get the other boulder onto the pressure pad. Walk through the mirror at the lower right of the arena and, finally, take the bottom exit.

▼ Et voila, you've completed level two! Don't get too cocky though because there's still quite a way to go! Until next month, folks...

Helping Hands

machine room and fit the bronze spoked wheel to the front of the machine. Pour the lava down the funnel at the top and reap in the orichalcum beads. Remove the spoked wheel again and head for the Sentry room. Use one bead in the fish head, one in the eel sculpture and the last in the statue's mouth. Go on through to the dungeon.
Hope that helps!

ADVENTURES OF ROBIN HOOD

Dear AF,

Can you help me with some very good cheats for Robin Hood please? For example, how do you use certain numbers with the ALT key?

Simon Todd, Warrington.

Sure thing Simon. During play, press and hold the ALT key and type in any of the following numbers for different effects:

370 Outlaw stag hunting
371 Outlaw merry men
372 Outlaw Robin Hood
373 Put a price on Robin's head
441 Cycle through seasons
213 Move to island near Little John
214 Move to spring near wizard
659 Make merry men join up
103 Make Marion fall in love with Robin
166 Maximum heroism
167 Minimum heroism
828 Legalise Robin Hood
666 Cause a church service

SEND US YOUR TIPS!



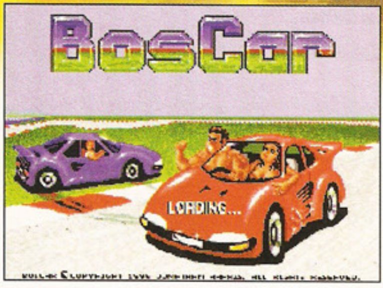
If you've got some hints, cheats, tips or general good advice on any Amiga games – especially some of the newer ones like Uropa2, Bograts or whatever, then don't keep 'em to yourself – send 'em in so we can pass 'em onto other gamers who might be having more problems than yourself.

Also, if you've got a query about a game (and, no, I don't really mind people asking about The Secret of Monkey Island), then drop us a line and we might be able to answer it in Helping Hands.

HELPING HANDS • Amiga Format
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PD Select

Dave Cusick takes his monthly look at what's hot and what's not in the world of PD and Shareware.



BOSCAR

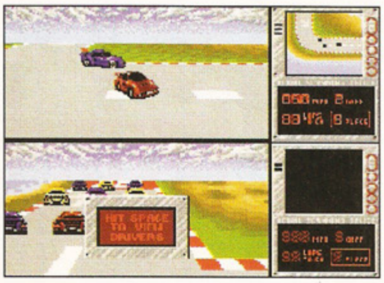
By:	Jon Harris
Ware:	Demo
PD Library:	Norwich PD
No of disks:	One
Price:	80p + 80p P&P

I'm not really a boy racer. Let's face it, when you drive an aging Renault 5, it's not a realistic possibility. Reliable and lovable though it is, my car's never been a powerful beast. It's a tad frustrating being stuck behind an extremely slow-moving Nissan Micra (it's always a Nissan Micra, trust me) for miles and miles, unable to get past the thing because ramming your foot to the floor does little more than burn more petrol. If you try to accelerate in my car, it wants a few minutes to think about it.

Perhaps it's because so many of us own cars which aren't all that powerful that we all seem to be suckers for racing games. Psychologists will probably have a field day with this, but we blokes seem to be hung up on a desire to drive fast, and those of us with too much common sense to drive quickly on a real road and/or too little money to spend on expensive cars tend to love computer racing games as they gives us a chance to act out our particularly sad dreams.



Quite why Alanis Morissette wants you to win a car race is beyond me.





Driving "out" of the screen (left) can be tricky to start off with. (Below) The many options available in *Boscar*.

Boscar is a slickly-designed 3D racer owing much to the likes of *XTreme Racing*. One or two players can hurtle around a couple of fancy tracks, competing against a host of computer-controlled vehicles and, on some courses, the elements too.

Getting to grips with the control system won't take long, but learning to control your vehicle properly may well do. As well as driving "into" the screen as in conventional racing games, the cars can turn sideways and at times you have to drive your car "out" of the screen, towards yourself. There's a handy scanner to help you out here, but it can take quite a while to get used to driving in this way.

It's perhaps a little easy to oversteer, but *Boscar* is quite a polished piece of software. The full version features six tracks and a full grand prix option, whatever that involves, and it's available directly from the author for ten of your English pounds. From the looks of this demo, buying the full version may be a very sensible move.

FORMATION 1.1B

By:	Tim Cribbin
Ware:	Share
Available from:	Aminet
Directory:	util/wb

Formation is described by its author as a virtual directory tool. This means that the program is capable of manipulating files and folders, as with traditional directory utilities such as DOpus, but it can also group similar files together into virtual folders, irrespective of their actual position on your hard drive or on any removable devices.

Because you can, for instance, create a group containing all your image files, even if they are scattered across a couple of partitions, a CD drive and some floppies, on one level *Formation* functions like a glorified disk cataloguing system. You can search for a particular file using filters for dates, filetypes and text strings, without having to remember exactly where it's stored – the program looks after details like that.

Formation supports and recognises most datatype classes as standard, and you can configure it to handle other filetypes quite easily. Clicking on a file or folder brings up a small requestor stating what the file contains and offering appropriate action options. For instance, by clicking on an LHA archive you can view its contents or extract it to your chosen destination.

Formation 1.1 includes a directory caching feature which makes working with floppy drives and other removable media a great deal quicker because the program stores a copy of the directory listing on your hard drive. This means you won't have to spend so long waiting around for your machine to catch up with your actions.

The demo version of the program is fully functional, but features a requestor that pops up every couple of minutes to remind you to register. The registration fee is £10. *Formation* isn't perfect. Not every function is as easy to access as it might be, and the fact that the menu options disappear when you're in drive browsing mode rather than group viewing mode threw me a little at first.

PD selection of the month

Fish Head Budda

By:	Matt West
Ware:	Licenceware
PD Library:	F1 Software
No of disks:	One
Price:	£3.99 + 75p P&P

Fish Head Budda, not surprisingly, was inspired by the principles of Buddhism. You won't find any marauding alien forces to vanquish here, you won't have to take on the entire army of a dodgy totalitarian state armed only with a small radish and you don't have to guide a fat, irritating Italian plumber through a colossal array of intricately designed, two-dimensional, platform-based levels to rescue a busty young lass from the clutches of an evil ape.

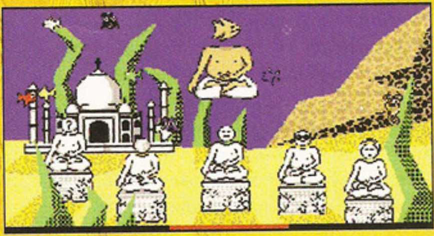
Playing *Fish Head Budda* is, like, an altogether more cosmically karmic experience, man. Since the game is intended as something of an allegory of Buddhism, it comes complete with a document outlining some of the central principles of Buddhism. The Buddhist concept of Samsara involves "an endless cycle of rebirth in which the actions of a creature in its life, good or evil, affect its future incarnations. You can only break this ring by attaining enlightenment, ie. ridding yourself of all suffering and craving. This state of non-rebirth is called Nirvana." Accordingly, attaining Nirvana is the objective of the game.

To quote from the accompanying Hypertext manual, "To do this you must be reborn as a number of different creatures, finding the final configuration of each and ascending to the next one." There are three difficulty levels in *Fish Head Budda*, and you can save your position in the game so that your journey through the lives of various beasties need not be played out in its entirety in a single sitting.

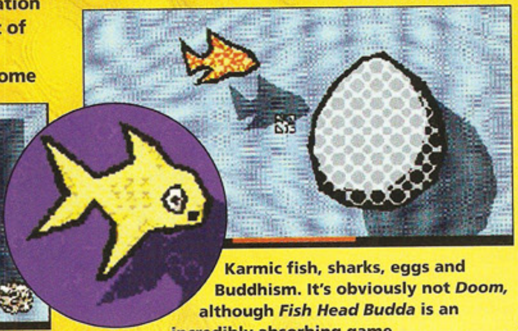
Once you've negotiated the options screen, your search for Nirvana begins. On the first level you will be presented with an egg and you have to transform the egg into a new configuration, that of a bird, by clicking in various places. It's all extremely surreal, but hugely absorbing. At the bottom of the screen you'll see a red bar. This indicates the amount of karma you have and should this fall to zero you will be returned to the original configuration of a creature.

When you've found the final configuration of a creature, you'll need a certain amount of karma in order to be reborn. Karmic fish occasionally swim across the screen, and some nasty sharks are also lurking around, waiting to take bites out of your karma.

If you think that *Fish Head Budda* sounds a trifle offbeat then you're right. I have never come across such a strange game. Don't be put off by the deliberately vague instructions or by the bizarre nature of the gameplay as *Fish Head Budda* is a breath of fresh air in a stale gaming world. It's got sumptuous graphics, excellent music and it's utterly engrossing.







Karmic fish, sharks, eggs and Buddhism. It's obviously not *Doom*, although *Fish Head Budda* is an incredibly absorbing game.

Still, the idea behind *Formation* is a good one, and it's a program that should earn itself many fans.

RUBICON

By:	Ben Wright
Ware:	Free
PD Library:	Norwich PD
No of disks:	Two
Price:	65p + 80p P&P

Inspired by an article in the *Independent*'s Network+ supplement the other day, not to mention eager to find out why some of my friends had been raving about it for weeks, I spent a couple of hours the other day downloading and installing software capable of playing MP3 files and searching for some decent tunes.

MP3 is the latest, greatest musical storage format – a CD-quality tune can be compacted to around 4Mb. Not surprisingly, the big record companies are terrified of MP3 because, over the past few weeks and months, hundreds of sites have sprung up offering 4Mb CD-quality versions of popular records. An enterprising individual with an Internet connection and a CD-writing drive could cobble together their own compilation albums quite cheaply and easily.

The likes of Geffen Records have demanded that MP3 archives containing copyright material be shut down However, in the future it seems likely that record companies may just be bypassed altogether, with people paying a band directly to download a record from the Internet to their hard drive, and later burning songs onto a CD for portability and convenience.

Just over a decade ago, computer users were being wowed by musical technology a lot less advanced than MP3 files. Tracker modules, produced with programs like *ProTracker* and *OctaMed*, were just starting to appear, offering computer musicians their first chance of producing realistic-sounding tunes without needing expensive MIDI set-ups.

Over the years since, Tracker module disks have appeared in their thousands. *Rubicon* is simply one of the latest. There are six tunes here and, to be honest, they're not bad. Tracker modules have a tendency to be either weird pseudo-gothic rock compositions or cheesy upbeat dance affairs owing to the limitations of the format, and *Rubicon* falls into the former camp with the obligatory grinding guitar samples and organ dischords. I've heard worse (indeed, I've composed worse!), but I've also heard a lot better, and I have to confess I'm not keen on some of the titles. "Among the Immortals" and "Seize the Night" sound like they ought to be prog-rock and mid-eighties soft rock tunes respectively.

There are a couple of pictures to look at, but that's all – the emphasis is on the music. If you're into pseudo-gothic rock compositions, you'll like it. I can't say I did, however.

Not sure what this dodgy looking bunch have to do with goth-type musical rumblings. Maybe it's the black leather.



PROTOTYPE

By:	Christopher Caleb
Ware:	Licence
PD Library:	F1 Software
No of disks:	Five
Price:	£7.99 + 75p P&P

Remember *Operation Wolf*? It provoked something of an outcry amongst busy-bodied do-gooders owing to the fact that the original arcade machine had a bloody great gun mounted upon it, the sole object of the game being to gun down wave after wave of enemy troops.

The computer conversions were enormously successful, with every Spectrum and Amstrad owner I know splashing out for their own

Continued overleaf ➡

monochromatic multi-load interpretation of this mid-eighties arcade classic. *Prototype* is *Operation Wolf*, it's as simple as that. Using the mouse you must mow down thousands of innocent soldiers, all probably fighting for a cause they don't believe in, for a country they're too young to vote in.

Pressing the left mouse button fires a bullet, pressing the right mouse button reloads your gun, pressing the shift key fires a missile and that's all there is to it. Given that the premise of the game is so simple, it's amazing that *Prototype*, like *Op Wolf* before it, is so much fun to play.

It's definitely a wise move to install *Prototype* on your hard drive because the game comes on five floppies, and swapping between floppies has never been my idea of a good time.

The programmer has made copious use of colourful and beautifully stylised pictures throughout the program, and the in-game graphics themselves are quite good. Picking out soldiers against the backdrop isn't always easy, but then again I suppose that's what camouflaged clothing is for. The amount of in-game graphical detail can be adjusted so that owners of slower machines won't find the action a little on the slow side.

Magazines initially contain 100 bullets each, and you start the game with 3 magazines, so obviously more ammunition must be collected along the way from enemy soldiers and ammo containers. You can increase the number of bullets in a magazine by collecting certain bonuses. You can also collect missiles as you go, which is just as well since you begin the game with only one of them at your disposal.

As you would expect, your current status is represented via an on-screen energy bar. Collecting a flak jacket will increase your capacity to sustain hits.

With three difficulty levels and a fair few enemy soldiers to brutally gun down, this should keep even the most vicious psychopaths occupied for a fair while.

B-CARD

By:	Bernard Cain
Ware:	Free
PD Library:	Classic Amiga Software
No of disks:	One
Price:	£1.00 + 75p P&P

In addition to a fair few submissions from authors themselves, every month PD Select gets sent the latest additions to the catalogues of several PD libraries. The disks are generally accompanied by a brief description of their contents. The most recent letter from Classic Amiga Software made interesting reading. "At last!" it exclaimed, "A business card maker for the A1200 programmed in 1998 by Bernard Cain."

You'd be forgiven for thinking that the future of the Amiga depended on the appearance of an AMOS business card maker, and one produced by the author of *Draw Selector* (reviewed last issue) at that. I'm being a trifle unfair, aren't I? In all honesty, *B-Card's* not bad in that it does what it's supposed to do, and it does it with the minimum of fuss.

The main menu offers you the chance to make a card, load a card, edit a card or delete a card. It's charmingly straightforward stuff. Cards consist of five lines of text, each made up of up to 32 letters. You can load fancy designs or borders to brighten it up, and if you think that the two borders supplied with the program won't suffice, you can purchase a disk full of the things from the author for £2.

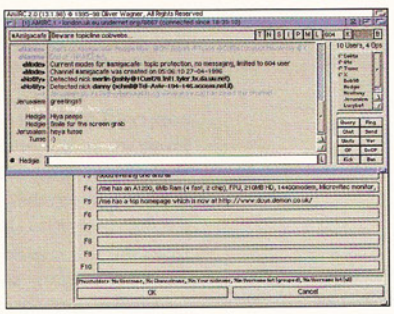
You can view your card against a variety of coloured backdrops to simulate what the finished product will look like when printed on coloured paper. The program will squeeze ten cards onto a sheet of A4 paper. The business cards *B-Card* will produce might not exactly be the most sophisticated and stylish examples of their kind, but they're more than adequate for the small businessperson looking to make some sort of impression on prospective clients.

If you fit that description, and you don't want to bother investing in a full-blown DTP package just to produce some calling cards, *B-Card* could be just what you're after.

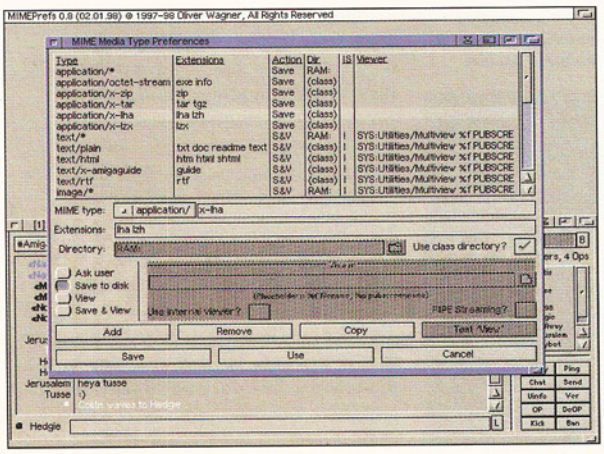
AMIRC 2.0

By:	Oliver Wagner
Ware:	Share
Available from:	Vaporware
URL:	http://www.vapor.com

I don't normally feature Internet-related programs in PD Select because they are covered elsewhere in the magazine. However, in the case of *AmIRC* I'm making an exception because, firstly, in my opinion, Olli Wagner is one of several programmers who've really helped keep the Amiga's head above water over the last couple of years.



***AmIRC 2.0*: cheesy as it sounds, the best has indeed just got better.**



The MIMEprefs window makes working with DCC'ed files much easier.

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Secondly, *AmIRC 2.0* represents a substantial upgrade to what is, in my opinion, the most powerful and user-friendly Internet Relay Chat client in existence, on any platform. Having extensively used *mIRC*, the dominant PC client, I can honestly say there's nothing to touch *AmIRC* on Windows systems. I've been a registered user of *AmIRC* since its original release and I've seen a great program constantly improving.

Finally, I believe that a high-quality piece of Shareware is more deserving of coverage than a sub-standard piece of PD gaming tat that nobody in their right mind would dream of purchasing.

IRC is interactive in a way in which the Web is not. People can talk almost in real-time, discussing anything of interest to them in groups ("channels") formed for just that purpose. If you're having trouble with a piece of Amiga software, you're probably more likely to find a solution in an IRC channel than you are through Usenet newsgroups.

If you didn't think it was possible to improve one of the Amiga's most well-loved Net applications, you're in for a surprise. Since the last public release, v1.69, *AmIRC* has a host of new features which will make it even more useful to seasoned chatters. There's a MIMEprefs feature that lets you automatically view and save files received via DCC. There's a lag-o-meter, which pings the server every 30 seconds and shows the current lag in a gauge below the user list.

Channel and Query windows can be iconified into a little tray, there's better protection against CTCP floods and there's a low-level Plugin API, which should pave the way for more Plugin extensions to *AmIRC* over the coming months. Registering your copy of *AmIRC 2.0* costs slightly more than v1.x registration did, but if you've got a legal version 1.x keyfile then you don't have to pay any extra for this new release.

WIN! Competition!

Master ISO



Asimware have given us five copies of their brand new CD-authoring software, ***MasterISOv2.*** Each copy is worth £59.95, but you could get one for free in our easy to enter competition.

MasterISOv2 is a second generation CD-authoring product. This is so far ahead of the original version, the only similarity is the name. Features include easy CD copying, Track At Once and Disk At Once burning, full Rock Ridge and Jolliet support – believe us, there are too many to list here, but look out for our extensive review in next month's issue. In the meantime, if you want to get your hands on one of the five copies we have to give away, all you have to do is answer the following simple question:

" What is the name of the common data format standard used by CD-ROM publishers?"

A. BS4770
B. ISO9660
C. NCC 1701
D. Channel 5

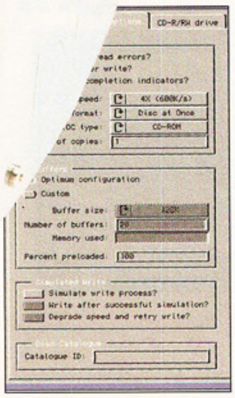
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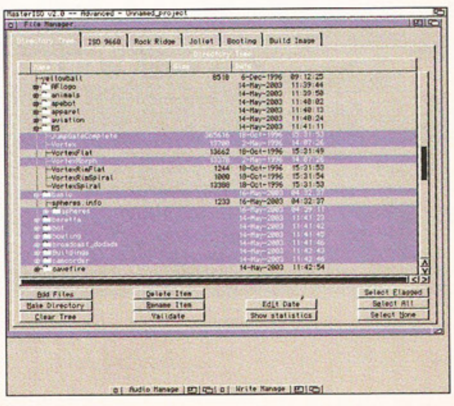
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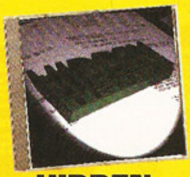
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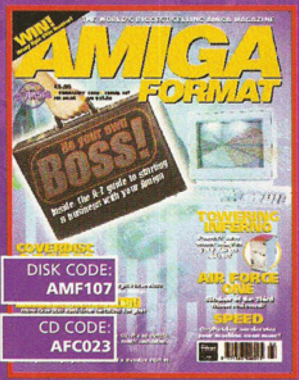
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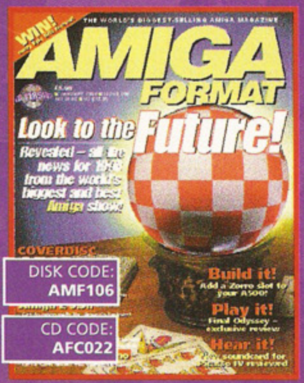
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Weird things go on in our office. Eyetech's massive tower has been dubbed 'the biggest computer in the world... ever!' by other Future minions who pass through our offices. It was even blocking out the light to my desk which meant that nothing could grow in its shadow. Still, good news for the cleaners, fed up with having to remove mould from the cups scattered about the place, eh?

The St. Louis show didn't hold many surprises or much good news for the American Amiga faithful who attended the show, but we expect the WOA will in about a month's time.

Ben Vost



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...is very simple. *Amiga Format* is staffed by some of the most experienced Amiga users in the world and what we say goes. OK?

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90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an ***AF Gold*** – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.

Blizzard PPC

The ultimate A1200 accelerator can only be adequately reviewed by the ultimate magazine editor. Or **Nick Veitch.**

At last! Now the masses can join in the Power PC revolution, as the Blizzard PPC brings the processing power of the Motorola PPC603e to an A1200 near you. It is several months late, but given the scale and complexity of such a product it is rather surprising it has happened at all.

What is even more surprising is that the board is so small and relatively neat. In fact, it is so small it will actually fit in the trapdoor slot of the A1200, even when populated by SIMMs. Now, finally, a large percentage of Amiga owners have the potential to use this radically new processor.

If nothing else, this will provide a bigger incentive for software developers to consider the PPC market and to adjust their plans accordingly.



The support material for the PPC includes a system disk (which must be installed first), a SCSI disk (if you have SCSI) and a CD containing many demos and utilities – most of which require a graphics card...

TOO HOT TO HANDLE?

If you are thinking of buying this Blizzard for a desktop, unmodified A1200, you can probably expect a few problems unless you take adequate precautions – this unit gets very hot.

> *Now, finally, a large percentage of Amiga owners have the potential to use this radically new processor.*

It's hardly surprising really. The PPC603e was designed with a heatsink in mind. Its manufacturers even decided to leave the ceramic lid off most models so the processor could be fitted more closely to a cooling device. phase 5 have done an admirable and cunning job of trying to combat this problem. Aside from a huge heatsink enclosure, which takes up half of the board, there is also a cooling fan.

However, due to height restrictions, the fan has to be unconventionally situated on the underside of the board. To let it do its job, there is a hole through the middle of the PCB. The fan blows (hopefully) cooler air through the hole, which is funnelled through the heatsink to the processor. A large label on top of the heatsink panel reads: "Warning: Do not operate without cooler".

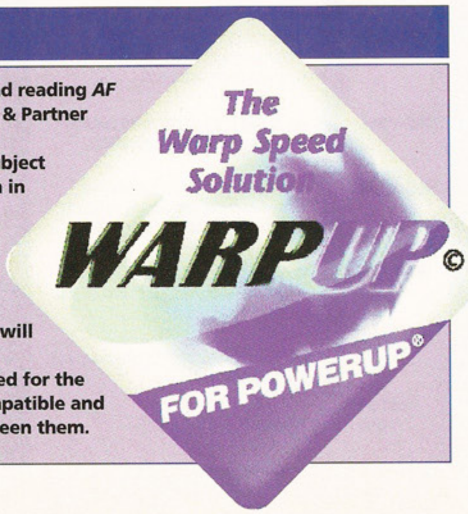
Believe me, if it's been switched on for any length of time, you won't be able

POWER UP VS WARP UP



If you have been keeping abreast of the news and reading *AF* regularly, you will know that phase 5 and Haage & Partner have rather different views about how software development for the PPC should proceed. This subject was covered in greater depth by Simon Goodwin in last month's issue (*AF109*), and is well worth reading if you are thinking of buying the Blizzard PPC for development purposes (back issues are available if you missed it – call our hotline on 01458 271102).

For non-developers, all it means is that you will regularly find two versions of PPC software, like *PPCfractal* and *PPCfractalWOS,* which are compiled for the different systems. Unfortunately, they are incompatible and your Amiga will need to be reset to switch between them.

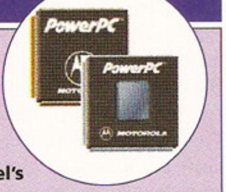




Mmmmm. Me Want. But most of the top-flight PPC software will probably need a graphics card.

to approach it, never mind remove it. It does work, but at the temperatures this unit can reach, one begins to worry about leaving scraps of paper anywhere near it. You would certainly be advised to leave the trapdoor cover off and perhaps raise the base up slightly to allow more airflow. Or, perhaps more sensibly still, you could get a tower.

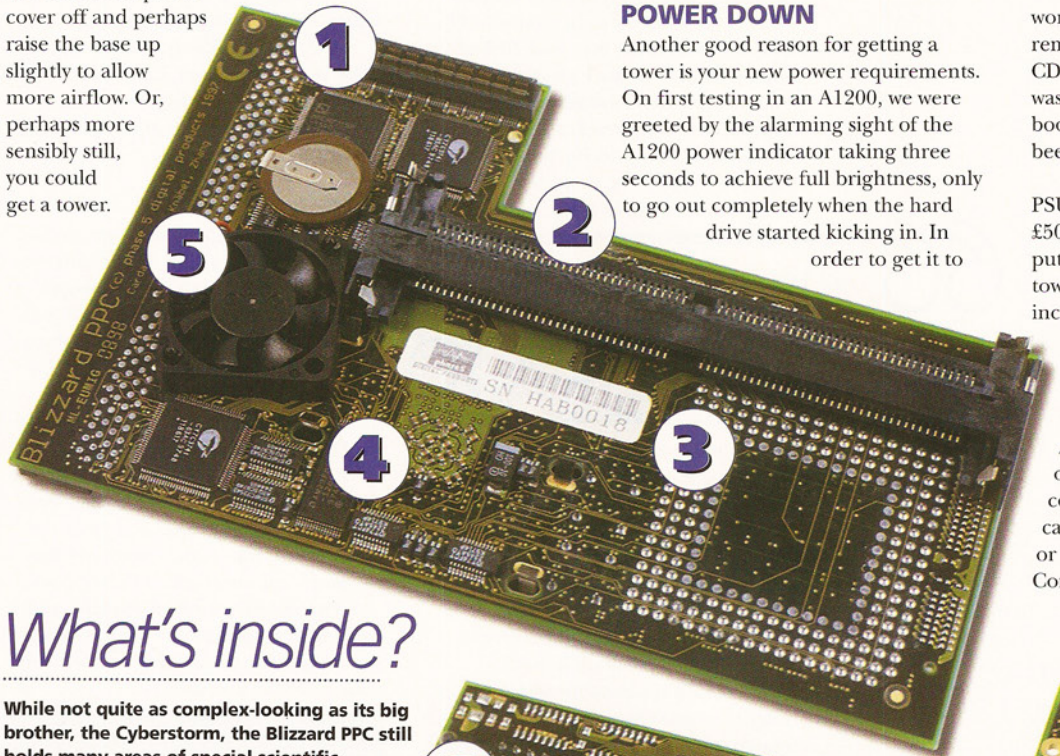
WHY PPC?



Motorola's PPC is a popular choice for computer CPUs and embedded control applications.

The PowerPC family of processors have been created by chip manufacturer Motorola, who also make the 68K series of processors that Amigas have always used. Taking a departure from their more traditional chip design, Motorola decided to create a RISC processor which would be far faster than the standard 680x0 processors, and faster than rival Intel's Pentium. The PowerPC can be faster because it is a RISC processor. RISC stands for Reduced Instruction Set Computer (or Component, depending on who you listen to). This means that the chip actually has less instructions in it, but because it is less complex, it can be manufactured smaller and can go much faster as a result. It is therefore possible to produce a PowerPC which can perform tasks around eight times faster than even the fastest 68060. In fact, the latest, fastest PPC chips (though not the ones used in phase 5's Power Up boards) are faster than the fastest Intel processors.

Although phase 5 are currently the only people producing PowerPC accelerators for the Amiga, it is expected that other manufacturers may well design their own. As phase 5's PowerUP project received official praise from Amiga Inc., it seems likely that further developments may take this route.



POWER DOWN

Another good reason for getting a tower is your new power requirements. On first testing in an A1200, we were greeted by the alarming sight of the A1200 power indicator taking three seconds to achieve full brightness, only to go out completely when the hard drive started kicking in. In order to get it to work on a standard PSU we had to remove everything, even the PCMCIA CD-ROM drive interface. Even then it was touch and go whether it would boot. Basically, you are going to need a beefier PSU.

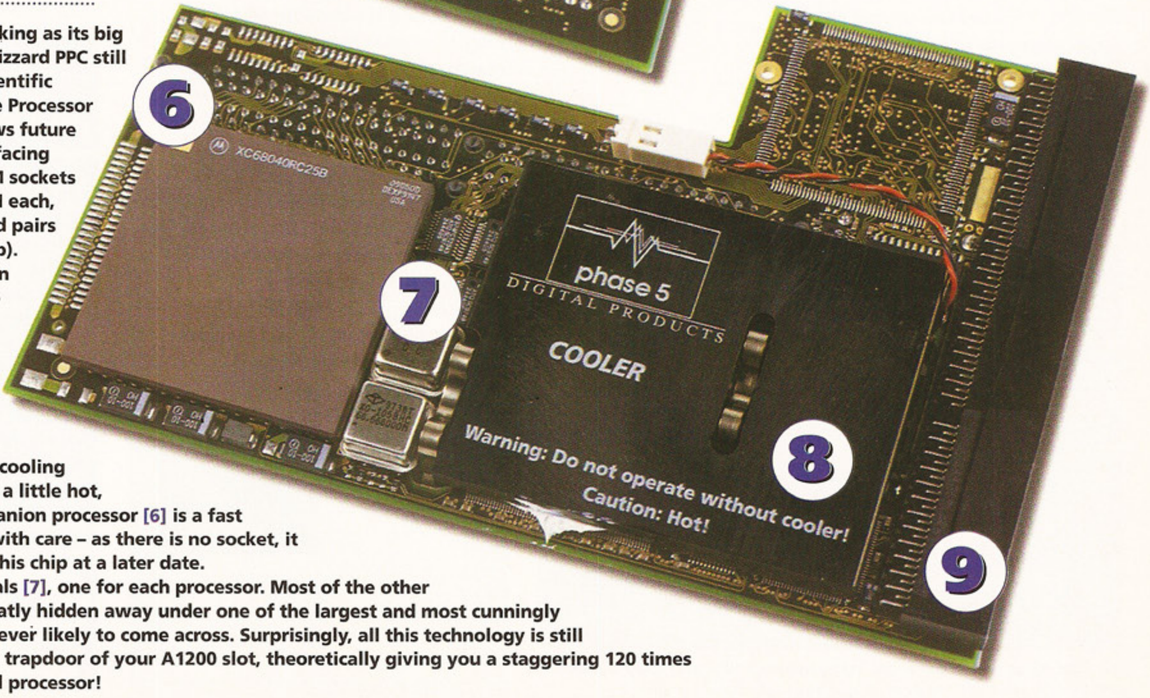
Of course, you can get external PSUs, but as these cost in the region of £50 anyway, you might be better off putting that cash towards a nice new tower. As if that wasn't enough of an incentive, I should also add that a great deal of the PPC software available requires a graphics card too.

OPTIONS

As with the Cyberstorm, you have the option to choose the type of companion processor used by the PPC card. The card will only work with '040 or '060 chips, though phase 5/Power Computing can supply these in a variety

Continued overleaf ➡

What's inside?



While not quite as complex-looking as its big brother, the Cyberstorm, the Blizzard PPC still holds many areas of special scientific interest. For a start, there is the Processor Direct interface [1], which allows future devices to work faster by interfacing directly with the PPC. The SIMM sockets [2] can take up to 64Mb of RAM each, but you need to buy in matched pairs (e.g. two 16Mb SIMMs for 32Mb). The underside of the companion CPU [3] tells a story – there's no socket to enable the CPU to be replaced. The underside of the PPC chip [4] tells a different story – it's tiny and so it's jolly fast.

One of the most essential components on this card is the cooling fan [5]. This processor does run a little hot, probably more so if your companion processor [6] is a fast '060. Choose your companion with care – as there is no socket, it will be impossible to upgrade this chip at a later date.

There are two timing crystals [7], one for each processor. Most of the other electronics on the board are neatly hidden away under one of the largest and most cunningly designed heatsinks [8] you are ever likely to come across. Surprisingly, all this technology is still reasonable easy to fit [9] in the trapdoor of your A1200 slot, theoretically giving you a staggering 120 times the performance of the original processor!

of ways, from a 68040 at 25MHz, to a 50MHz 68060. At the moment, no Blizzard PPCs are available with bare sockets, so you cannot use the processor from any accelerator you already have.

The only silver lining here is that Power Computing will buy back any current Blizzard accelerator you have when you trade it in against the PPC.

The companion processor is reasonably important. As long as a companion processor is required (for example, for as long as Workbench and Kickstart are written solely for 68K processors), it will be its job to pass instructions to the PPC and basically act as its minder for the purposes of interfacing with Workbench.

Depending on the type of application and the way PPC support is incorporated, it is entirely possible that software may run slower on a PPC and '040 combination than the same application on just a standard '060 card, due to context switching. This occurs when the software has to switch back to the 68K chip to perform some task, then switch back to the PPC.

Each time this happens, time is spent on internal housekeeping rather than the execution of the program and it seriously affects the efficiency of the processor's caches.

A SCSI interface is also an option, but not an optional extra. If you want SCSI, you'll have to buy it with the Blizzard as it won't be possible to add an interface later. Sensibly, the SCSI interface will be SCSI-2, so although you won't be able to take advantage of jolly fast RAID devices, you won't have to spend £40 on a cable either.

SPEED TRIALS

Unfortunately, meaningful speed trials on common applications, which is the usual way we like to test things, have no relevance in this case, for the simple fact that virtually none of the common power user applications are currently supported by PowerPC. *PPaint* is the only widely available package which does support the PPC, but even here it is only as a plug-in module for speeding up certain functions.

In terms of raw speed, the 166MHz 603e should be able to perform about 284 MIPs. That's roughly four times faster than a 50MHz '060. Alas, the raw speed value only indicates how fast the chip could go if it were in use all the time (which it invariably isn't on the Amiga). Also, you have to take into account that because of RISC technology (i.e. fewer embedded instructions) it is often necessary to perform multiple instructions when a 68K processor only needs to execute one. As a result, you can't directly relate the MIPs value of a 603e against that of a 68060 (which is about 80, by the way).

In any case, as the cognescenti will be quick to point out, assessments of raw speed bear no relation to the processor in actual use. Just as an '060 is nominally four times faster than an '040, it doesn't mean that everything you do with your Amiga will be four times faster. The only meaningful measurement is to test a wide range of applications in normal use, which we couldn't do for the reasons above. I suppose this is just a very long-winded way of saying that it should be faster, but just don't ask us to put a figure on it.

SOFTWARE SUPPORT

As you will surely be able to tell from this month's CD, there is a growing amount of software offering support for the PPC. We counted around sixty applications on this CD alone.

Some of the PPC ports are not exactly very useful, though. I don't want to single out any examples here, but, for example, some of the PPC optimised unpackers are for archive formats you will only use if you are heavily into Unix. The lot of the common man is hardly likely to be much improved by that (although it is useful for those who need it) and people are unlikely to be drawn to PPC processors because they save 10% of the time it takes to unpack an archive.

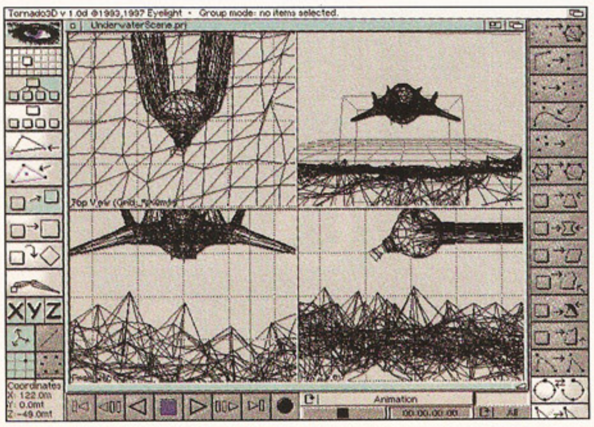
Much of the software so far is in that sort of utility bracket, mainly because PPC support for Gnu C is good and the code has been ported directly from freely available Unix source code.

> "As you will surely be able to tell from this month's CD, there is a growing amount of software offering support for the PPC."

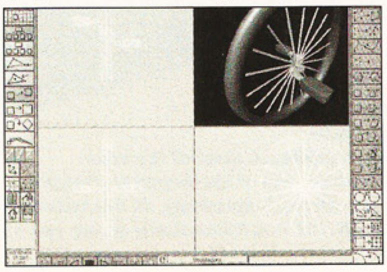
A1200 owners may not get much out of the demos that phase 5 supply on the accompanying CD. Most of these programs require a graphics card (and a CyberGraphX one at that) before they will even consider running. Mpeg players, 3D object viewers and Mandelbrot renderers all demand a CyberGraphX-compatible card.

The real applications which you might consider buying a PPC for are mainly still in development. Things like the excellent looking *Elastic Dreams* graphics manipulation package and *Tornado 3D* (which is due "any day now"), would be killer apps for PPC. Even then, most of these will require a graphics card of some description.

Of course, more mainstream software like *PPaint* and the forthcoming version of *ImageFX* will support non-graphics card machines, as will the PPC versions of *Doom*. All we are trying to say is that not having a graphics card will limit your options.



Tornado 3D **is one of the more mainstream products in development which will offer PPC support. A graphics card is not essential...**



A graphics card is promised for the Processor direct slot, to enable devices to be manufactured which can communicate directly with the PPC, letting them go much faster.

A CyberGraphX-type card is likely to be the first product, but phase 5 have not currently commenced work on it, so for the next six months at least this slot is likely to remain empty.

A FINAL WORD

There will probably be some grumbling about the lack of a CPU socket and the lack of a SCSI upgrade. Some people may also be unhappy that they will need a tower or an upgraded PSU at least to power this beast. At the end of the day though, phase 5 have succeeded in what seemed very unlikely even last year – a PPC card that runs on an A1200.

Although there isn't a huge amount of software to run on it yet, the amount is growing exponentially and most "serious" software, and a huge number of games, will soon offer PPC support.

This device is well engineered and well worth considering if you want more power, but do yourself a favour and put your A1200 in a tower first.

DISTRIBUTOR: Power Computing (01234) 851500 PRICE: From £239.95
REQUIREMENTS: A1200 (tower strongly recommended)

SPEED: ●●●●●
As fast as your A1200 can go.

MANUAL: ●●●○○
Usual, competent phase 5 fare.

ACCESSIBILITY: ●●●○○
Installing the software can be a bit fiddly.

FEATURES: ●●●●○
Well, it offers PPC compatibility!

VALUE: ●●●●○
Reasonable, especially given the trade-in offer.

OVERALL VERDICT:
Deserves a Gold award simply for working.

90%

Mustek 600IICD

Nick Veitch investigates a scanner that doesn't make your head explode if it doesn't like you.

There are many reasons why you might want to create graphics for use with your Amiga. You may want more textures for 3D work, you might want a nice backdrop for Workbench or perhaps you need some pictures for a multimedia epic about constructing a garden shed. Who knows?

One of the fastest, easiest ways of generating images is not to generate them at all, but to scan them in. It's quick, you can do it with virtually any Amiga and these days it doesn't have to be expensive.

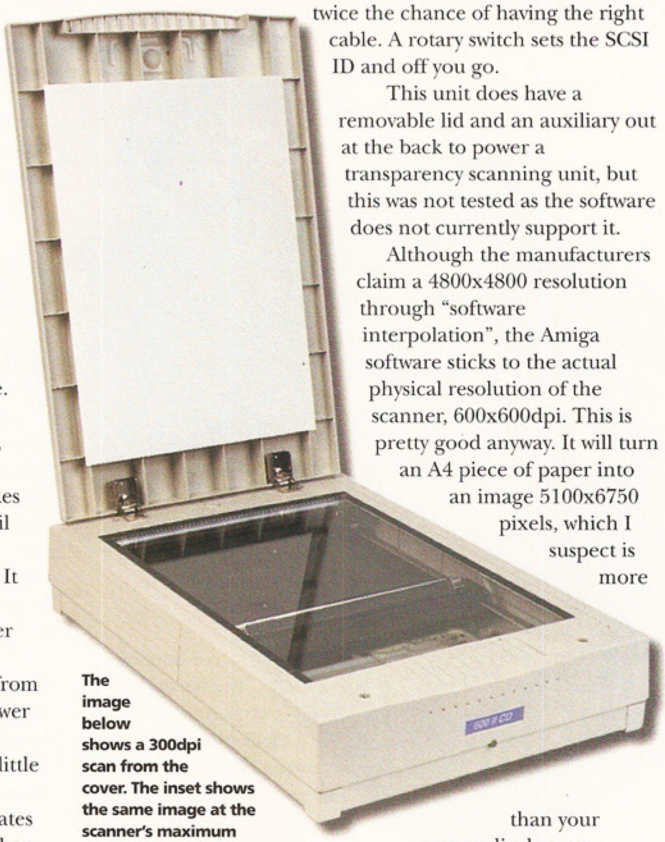
The Mustek 600IICD is really a second generation Mustek scanner, replacing the earlier 600P. It will shortly be joined in the 600dpi stakes by Mustek's 6000SP, which will retail at a slightly higher price.

The unit itself is desktop sized. It is only three inches wider than a sheet of A4, about five inches longer and stands a mere five inches tall.

The scanner derives its power from a standard kettle lead and has a power switch on the rear right hand side, which I would imagine would be a little inconvenient for most users.

A green LED at the front indicates that power is on, and also flashes when the scanner is busy. For some reason, Ben doesn't like this, but at least you can tell that something is happening.

At the rear there are two SCSI connectors, which is handy as the scanner doesn't then have to be at the end of the SCSI chain. Oddly, one is an old style SCSI-1, 25-way, D-type connector, the other is a SCSI-2, micro HD, 50-way connector. At least you have twice the chance of having the right cable. A rotary switch sets the SCSI ID and off you go.



This unit does have a removable lid and an auxiliary out at the back to power a transparency scanning unit, but this was not tested as the software does not currently support it.

Although the manufacturers claim a 4800x4800 resolution through "software interpolation", the Amiga software sticks to the actual physical resolution of the scanner, 600x600dpi. This is pretty good anyway. It will turn an A4 piece of paper into an image 5100x6750 pixels, which I suspect is more than your screen display can manage, or your memory can hold. In 24-bit colour, such an image would require 98.5Mb of memory, so higher resolutions become rather academic for the average user. Even a standard snapshot-sized picture would result in a scanned image of around 2700x2000 pixels, which is easily more than enough for most users.

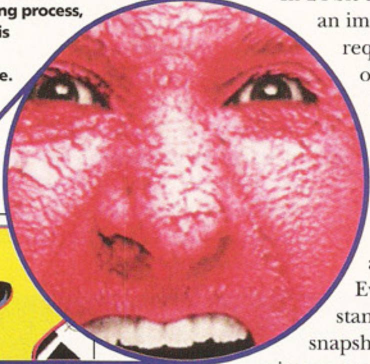
The image quality on the whole appeared to be very satisfactory. The only let down was scanning in 2-colour (line art) modes. Slight distortions of diagonals are one thing, but even basic blocks of colour had a tendency to be fairly jittery, to the degree that text could be completely illegible (especially to *OCR* software).

Unfortunately, it is impossible to say whether this is the fault of the scanner or the software, but judicious adjusting of the brightness and contrast controls alleviated the problem somewhat.

Colour scanning modes seemed to capture the gamut of the RGB spectrum accurately enough. The Mustek works internally to a 30-bit colour resolution, which allegedly makes colour selection more accurate. Whatever the reason, colours came out fine.

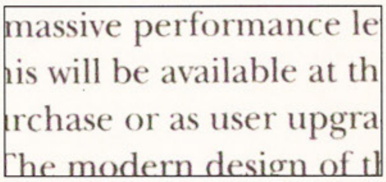
If you took a stopwatch to it, you could probably find a faster scanner, but it would be a photofinish. The speed will also be dependent somewhat on your memory access and size, so it isn't everything, especially when you consider the price of the Mustek. Even though the scanner pack should be retailing at a lower price, it's still great value compared to the alternatives.

If you are after a cheap, reasonable quality way of getting your artwork into your Amiga then I can certainly recommend this scanner.





The image below shows a 300dpi scan from the cover. The inset shows the same image at the scanner's maximum resolution of 600dpi. Although the software lacks any de-screening process, the result is pretty reasonable.


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The modern design of th

Text turns out fine in greyscale modes. This is text from our last issue at 600dpi.

SCANQUIX

The only Amiga software which supports this scanner at the moment is *Scanquix*. This was reviewed back in November (*AF103*, 90%) and secured a Gold award for its happy UK distributors, Eyetech. The software supports Epson, Artec and Mustek scanners at present, and costs a reasonable £59.95.

DISTRIBUTOR: Eyetech 01642 713185
PRICE: £199.95 (including software)
REQUIREMENTS: SCSI interface, (6Mb RAM recommended)

SPEED: ●●●●○
Scanning speed depends on many factors, but it certainly isn't sluggish.

MANUAL: ●●●○○
No separate Amiga manual, but it's dead simple to set up.

ACCESSIBILITY: ●●●●●
Ace *Scanquix* software makes it easy.

FEATURES: ●●●○○
Good, but dubious 1-bit scanning.

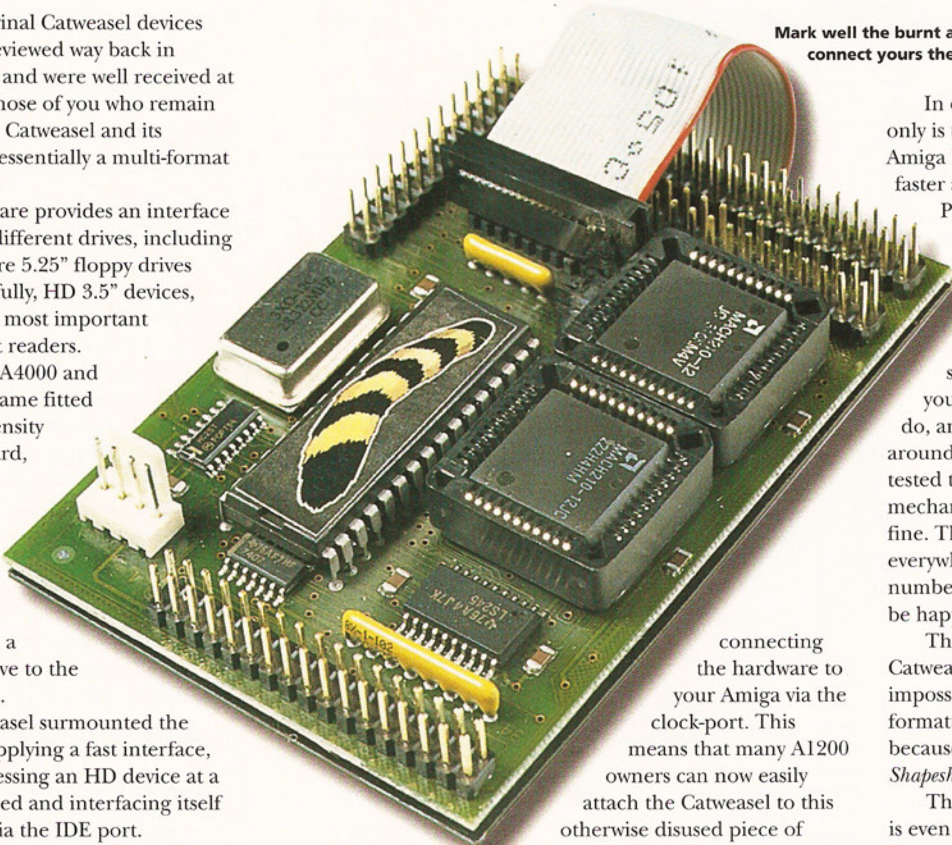
VALUE: ●●○○○
We hope the bundle price will be reduced, as the scanner is a lot cheaper.

OVERALL VERDICT:
Very good, but could be cheaper.

86%

Catweasel 2

In spite of the name, this device has more to do with floppy drives than old TV programs, as **Nick Veitch** explains.



Mark well the burnt area on this board, and remember to connect yours the right way around!

The original Catweasel devices were reviewed way back in *AF100*, and were well received at the time. For those of you who remain unaware of the Catweasel and its attributes, it is essentially a multi-format disk controller.

The hardware provides an interface to a variety of different drives, including old Commodore 5.25" floppy drives and, more usefully, HD 3.5" devices, likely to be the most important aspect for most readers.

Whilst the A4000 and many A3000s came fitted with a High Density Drive as standard, the A1200 has never sported such an item, and indeed, it was really rather difficult to add a second HD drive to the former models.

The Catweasel surmounted the problem by supplying a fast interface, capable of accessing an HD device at a reasonable speed and interfacing itself to the Amiga via the IDE port.

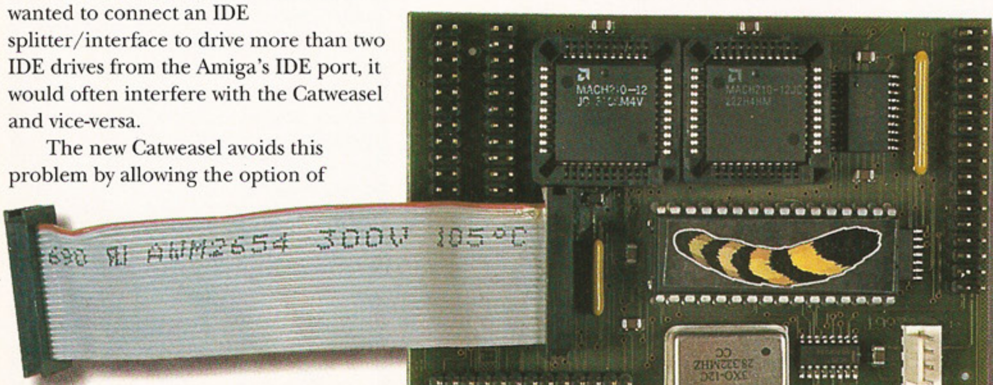
> "The Catweasel surmounted the problem by supplying a fast interface, capable of accessing an HD device..."

This caused some problems with the original, and is the major change to version 2. The problem was that if you wanted to connect an IDE splitter/interface to drive more than two IDE drives from the Amiga's IDE port, it would often interfere with the Catweasel and vice-versa.

The new Catweasel avoids this problem by allowing the option of connecting the hardware to your Amiga via the clock-port. This means that many A1200 owners can now easily attach the Catweasel to this otherwise disused piece of expansion interface.

Installation on an 1200 has been made slightly easier by the fact that the board is a lot narrower and smaller overall. The underside of the board has been covered with a simple thick insulator, which means there is no need to worry about things shorting out.

However, it has to be said that in a standard 1200 you are still a bit pushed for space as to where the card can comfortably sit.



The new Catweasel offers IDE or clock-port connections for greater compatibility.

In operation you will find that not only is the Catweasel faster at handling Amiga DD floppies, but it is also slightly faster at handling HD floppy disks and PC formatted disks too. In fact, the Catweasel is twice as fast at handling HD floppy disks as the "official" HD devices found in the A4000.

Of course, all this depends slightly on the actual drive that you use. Any standard HD drive will do, and you can pick one up for around £20, if not less. We have only tested the Catweasel with quality Sony mechanisms, but all drives should work fine. These drives are available almost everywhere – Maplin, Cirkit and any number of PC mail order companies will be happy to sell you one.

The only thing wrong with the Catweasel is that it seems almost entirely impossible to make it read Macintosh formatted disks, which is a shame because it could be of great use with *Shapeshifter* or *Fusion*.

The Catweasel plus Buddha option is even better for those of you with Zorro slots, but as it stands, this is the ideal solution for A1200 owners who really need an HD drive.

DISTRIBUTOR: Power Computing
PRICE: £49.95
REQUIREMENTS: A1200/4000

SPEED: ●●●●●
Fastest HD drive interface going.

MANUAL: ●●●○○
Could be slightly more helpful.

ACCESSIBILITY: ●●○○○
To install you will have to disassemble your Amiga.

FEATURES: ●●●●○
Good support for Amiga, PC and C64 devices, but what about Mac?

VALUE: ●●●●○
A fair price.

OVERALL VERDICT:
The fastest way of adding a HD drive to your Amiga.

88%

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Toshiba 32x Speed	£98



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*When bought with any SCSI device, £55 if bought separately

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Mix video & graphics with ease, supports AGA as standard

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BJC-4650 Colour Inkjet £265
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Stylus 600 Colour Inkjet £190
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Stylus 800 Colour Inkjet £265
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BC11 BJ70 Heat & Cart	£32
BC20 BJ4x00 Head&Black	£32
BC21 BJ4000 Head + Inks	£35
BC22 BJC4200 Photo Cart	£27
BC22K BJC4200 Photo Kit	£37
BC29F BJC4200 Fluores.	£32
BCI10 BJ30 Black 3 Pack	£11
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30x	£8.70	200x	£48.00
50x	£13.50	500x	£110.00

Bulk DSHD

10x	£2.40	100x	£21.00
30x	£6.90	200x	£40.00
50x	£11.00	500x	£90.00

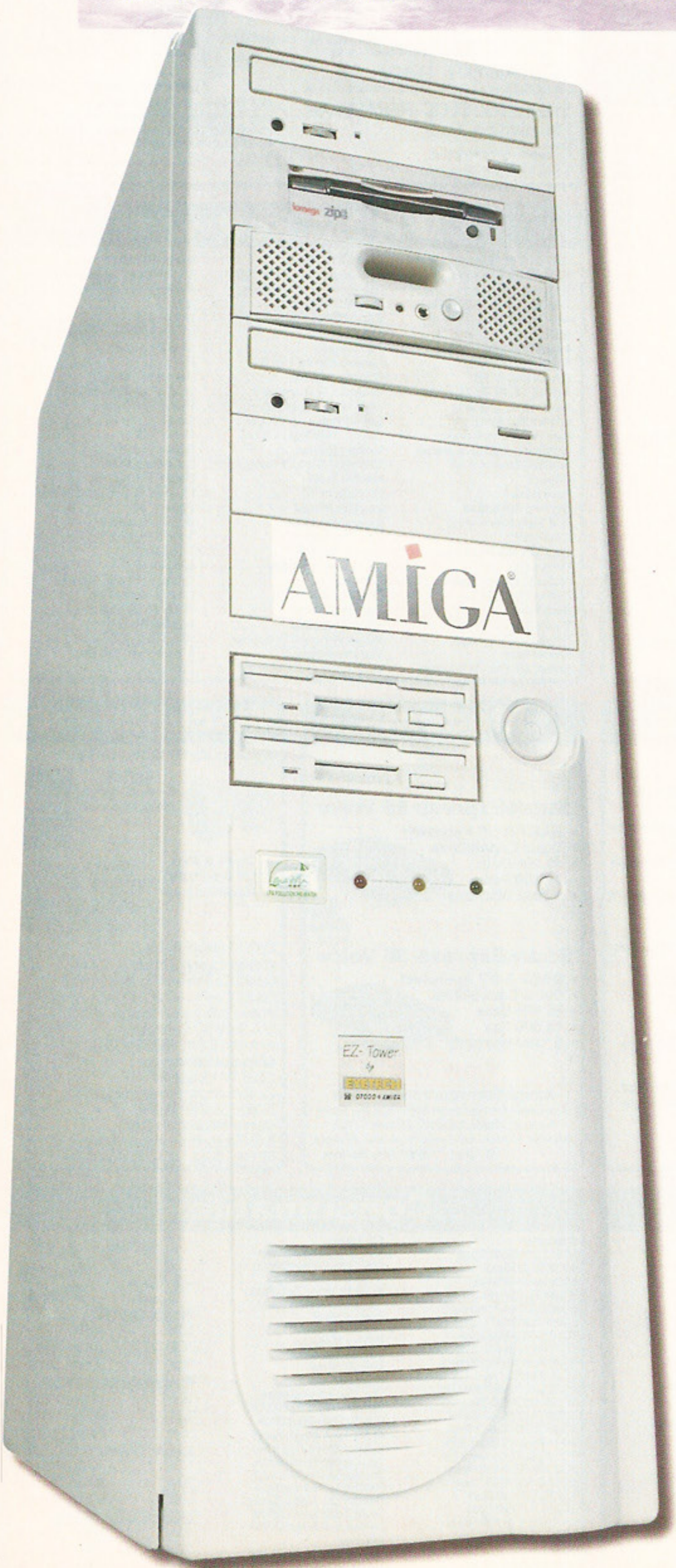
Branded DSHD

10x	£3.20	100x	£27.00
30x	£9.30	200x	£50.00
50x	£14.00	500x	£115.00

500 Disk Labels	£7
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Eyetech EZ PC Tower

Ben Vost is impressed by a monster machine that he almost can't lift.



The people at Eyetech have had this idea bubbling under for quite some time now: everyone complains that although the Siamese System is great for linking your PC and Amiga together, you still end up with two cases, two keyboards, two mice, twice the electricity consumed, but most importantly, twice the space taken up.

"What if", the brains at Eyetech thought, "What if you could manage to fit the whole lot into one box instead of two?". Well, that's what they've done.

What looks like a bog standard Eyetech EZ tower from the front reveals its twinning when you turn it around or take a peak inside the metal cabinet. If you already have an Eyetech tower then you'll probably be able to see just how this can be done, but for those who believed us when we said we didn't think it was possible, the way it works is by using all that empty space inside the huge tower that Eyetech supply, or rather by using up half of it, on the right-hand side of the machine when you look at it from the front.

The A1200 that is still the heart of your machine is on the left-hand side of the tower and there's just enough space left over for PCI cards on the PC side to provide the graphics, networking and more.

All this technology in one box has one very important consequence. Guess how much the Eyetech EZPC tower weighs? More than 18.5 kilos! That's how much this monster machine comes in at, all in.

That's more than my 17" monitor, that's more than, well, it's a lot, alright? Eyetech will supply it in two different ways. Firstly, as a complete machine that means you'll need to send them your Amiga, and secondly as a PC in a tower with extra bits dangling from it that you can attach your denuded A1200 to.

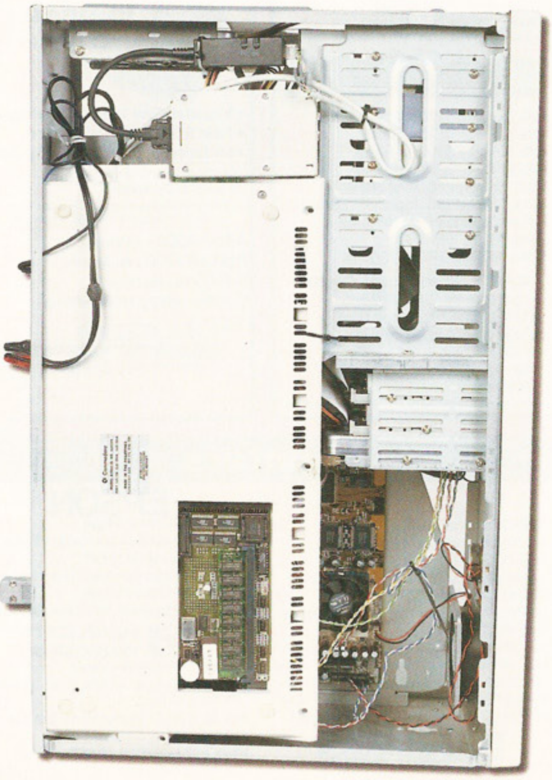
Either way, it's a bit of a mammoth maintenance job in the unlikely event that something does go wrong.

UPGRADING

This machine is heavily kitted out in the format we've got it, but if you want to take it further then you can.

Because of the way the Siamese system works, it means that you can get away with just buying one drive, whereas previously you would have needed one for your Amiga and another one for your PC.

This means that you'll have more money left over to buy add-ons that you can use on both sides of your Frankenstein machine, such as digital cameras, scanners, printers, samplers, genlocks and more.



That expanse of white is your A1200's underbelly!

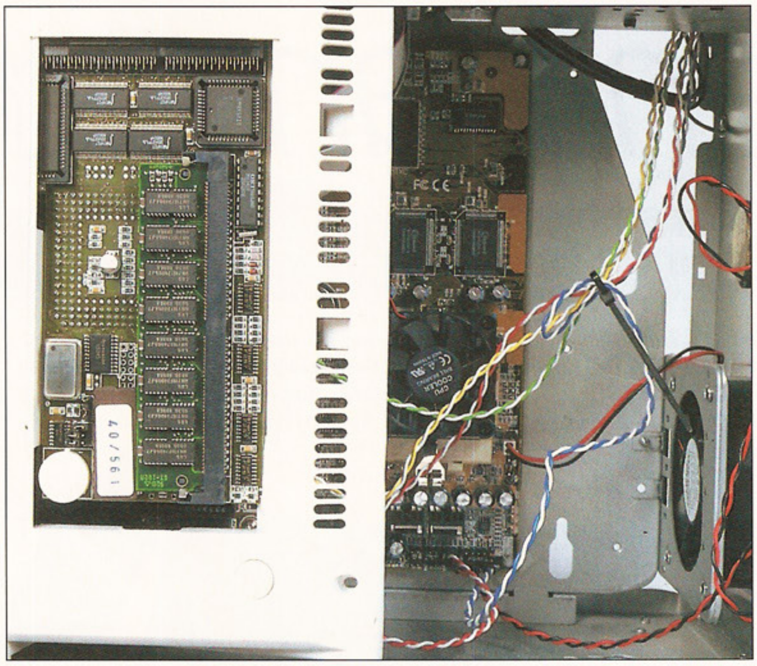
If you've bought the whole thing ready set up, which is how we received it, then it's very impressive in the sense that there's just the one power switch, one keyboard, mouse and monitor.

You switch it on and the PC side starts booting, followed by the much swifter Amiga. Copying and pasting between the PC side and the Amiga is seamless and easy, as is using the PC facility for AVI animations, etc, on your Amiga's "screen".

This is, of course, thanks to HiQ Ltd.'s excellent Siamese system, but Eyetech have added a few tweaks of their own, such as a TV card that can take your Amiga's video output, for things like *Scala*, and put them on the PC's screen too. All in all, it's quite a killer machine and refutes our statement from months ago that putting a PC and an Amiga into the same box wasn't really possible.

If, on the other hand, you've bought the thing as a PC for your Amiga, then boy do you have some work cut out for you. Eyetech always supply very good instructions on how you need to set things up, but I have to say that this isn't a job I'd want, especially if I had to fit my irreplaceable Amiga into a tower of this sort.

In addition, because of the way the PC scene seems to work, you'll need to have the box apart on several occasions to upgrade the graphics card, or the processor, or whatever. Eyetech have future-proofed the whole thing as best they can, but the time will come when you need to dismantle the whole thing.



The circuit board behind the A1200 is actually your new PC. Lovely, isn't it?

If you're the kind of person that doesn't break into a sweat at the thought of having your machine in bits all over your room, then congrats, buying one of these tower systems will probably be the most entertaining way you can spend your money. For mere mortals, however, the prospect of having to snip the cable ties that keep the A1200 securely in place in the tower alone is going to cause heart murmurs and extreme palpitations.

> *At the end of the day, will having your PC and Amiga in one case solve all your problems? It's doubtful.*

At the end of the day, will having your PC and Amiga in one case solve all your problems? It's doubtful. While it is nice to be able to simply switch on and go, having both components so inextricably linked will invariably more than double the diagnostic time when something does go wrong. At least if the bits you've got can be separately switched on and off then you should be able to narrow the problem down fairly swiftly.

With the Eyetech EZ PC you can't do this as you can't switch on or use your Amiga without the PC. Indeed, you can't use your Amiga until the PC has actually booted.

Likewise, unless you've actually put this thing together with your bare hands instead of getting Eyetech to do it for you, you're going to be in schtuck when it comes to adding new components if you're aren't altogether sure of how they combine and react with the existing parts of the system.

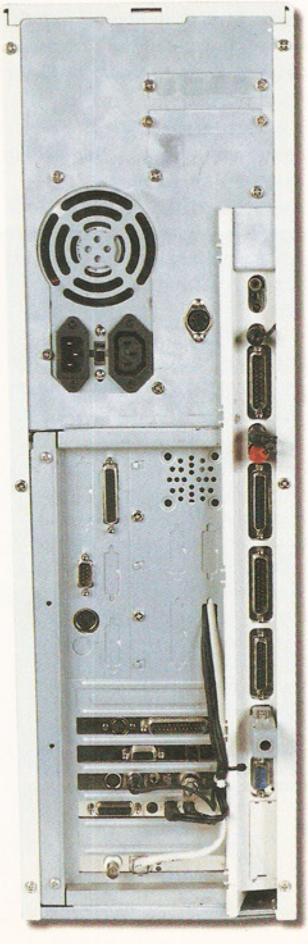
If you're not the kind of mad upgrader (that you must be to want to do this in the first place), that the PC and Amiga marketplace love, then you'll almost certainly get many years of trouble-free enjoyment from this Eyetech system.

However, unlike the Amiga where software is written to the current hardware, PC software is always written to the next generation of hardware, forcing users to go and upgrade their systems or be left behind.

Just as you might sneer at someone with an A600 now, PC owners sneer at people who don't have 3D graphics cards, MMX-less processors or hard drives that might have sufficed for an entire country ten years ago.

If you can stand that pace of change, and you're comfortable delving inside this machine, then go for it, as Eyetech have made something that is wondrous to behold.

On the other hand, if you don't count yourself as an 'extreme' user then you might be better off getting yourself a separate PC and a Siamese system and linking the two in a way that isn't space-saving, or as impressive at first glance, but one that you might be able to cope with.





Looks neat and tidy, but when you take off the lid – oh boy!

DISTRIBUTOR: Eyetech (01642) 713185
PRICE: £999.95 for PC with ethernet cards for both sides (Windows95, etc. extra). Call to confirm
REQUIREMENTS: A1200

SPEED: ●●●●○
Depends on your PC processor.

MANUAL: ●●●●○
Up to Eyetech's usual standards.

ACCESSIBILITY: ●●●●●
Very impressive unless you have to change some hardware.

FEATURES: ●●●●●
Nothing seems to be left out.

VALUE: ●●●○○
Pretty good, but it will seem expensive in six month's time.

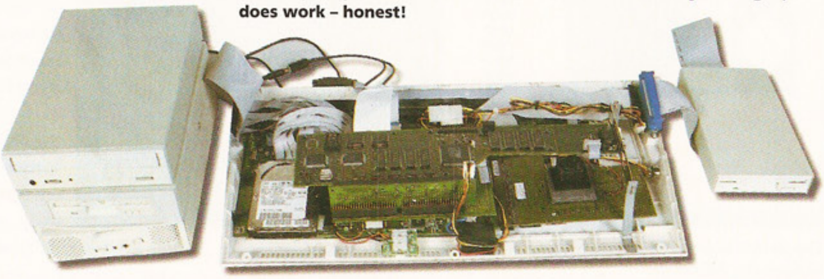
OVERALL VERDICT:
A dream for extreme users, a nightmare for most other people.

80%

Open plan Amiga

Ben Vost on the why's and wherefore's of adding a single Zorro II slot to your A1200 – without putting it in a tower.

So you don't really want a PC and you don't even really want a tower system but you're gagging for a graphics card? Eyetech's latest Heath Robinson invention is this standalone Zorro slot which can be mounted on your dissected Amiga 1200. While it might not be as much of a monster machine as the EZ PC tower, this exploded Amiga has got some funky stuff under its skin (or lack thereof). It also means major surgery on your computer, so it's probably not for the faint of heart or the person who thinks that a dust cover is an all-important peripheral (although it may well be now with this machine).



It's not pretty but it does work – honest!

Having said that, once the surgery has been performed, the mini-beastie performs rather well. Of course, having to use a PC keyboard isn't to every Amigan's taste, but if that's the price to pay for the ability to use a graphics card, it might just be worthwhile.

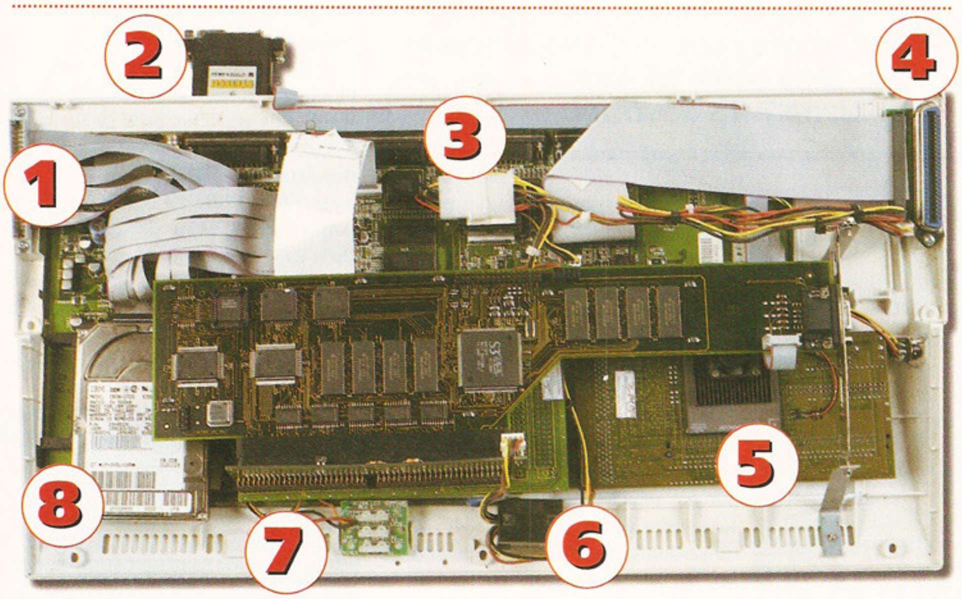
It's still worth pointing out at this juncture that chip memory speed on an A1200 is still comparable to the kind of transfers you can do over Zorro II.

Although a graphics card will offer you higher resolutions and more colours, you shouldn't expect the graphics performance of your machine to now be on a par with a Zorro II-equipped machine.

In fact, if you were to get a Blizzard PPC card to complete the picture and you got a graphics card because it would mean that you didn't have to use the chunky to planar translations that are necessary in AGA modes for games like *Doom*, you'll probably be surprised to hear that AGA will probably be faster for you than the graphics card.

This is because that added horsepower is easily enough to make up for the the chunky-to-planar performance shortfall.

Naked A1200



1. IDE connector for all those lovely drives. Adding a CD-ROM drive or a larger hard drive should no longer be a problem.
2. Monitor switcher. This tiny scandoubler takes care of switching between CyberGraphX modes and AGA. It connects to the scandoubler socket on the CV64/3D so that you don't have to keep unplugging either end.
3. Keyboard adaptor. You can see the socket for your keyboard over on the right-hand side of the machine, just in front of where your floppy drive used to be.
4. Floppy drive port. Okay, it's a non-standard connector for a floppy drive, but since you have to remove your internal unit to make way for the Zorro slot and the like, you may as well make use of it anyway.
5. Processor power. There's still space in your machine to have a decent accelerator card, and now no worries about overheating due to being inside the A1200's case.
6. Since you really want to have the information you had before the surgery, the LEDs from the case top are now transplanted here.
7. Zorro II slot with CyberVision 64/3D. This is what it's all about, the heart of the machine. The whole reason your Amiga now looks like something left over from Dr. Frankenstein's lab.
8. Hard drive. In a completely different place to before, your hard drive sits quite happily nearer the front of your A1200. Now, Igor, all I need is for you to get me a fresh brain...

DISTRIBUTOR: Eyetech (01642) 713185
PRICE: Check with Eyetech (there are far too many variables to give the costs here)
REQUIREMENTS: A1200

SPEED: Will take you a while to set up.	●●●○○
MANUAL: Up to Eyetech's usual standards.	●●●●○
ACCESSIBILITY: It's almost like having a proper Amiga.	●●●●○
FEATURES: Nice to be able to use a decent monitor.	●●●●●
VALUE: Quite expensive for what it will actually give you.	●●○○○

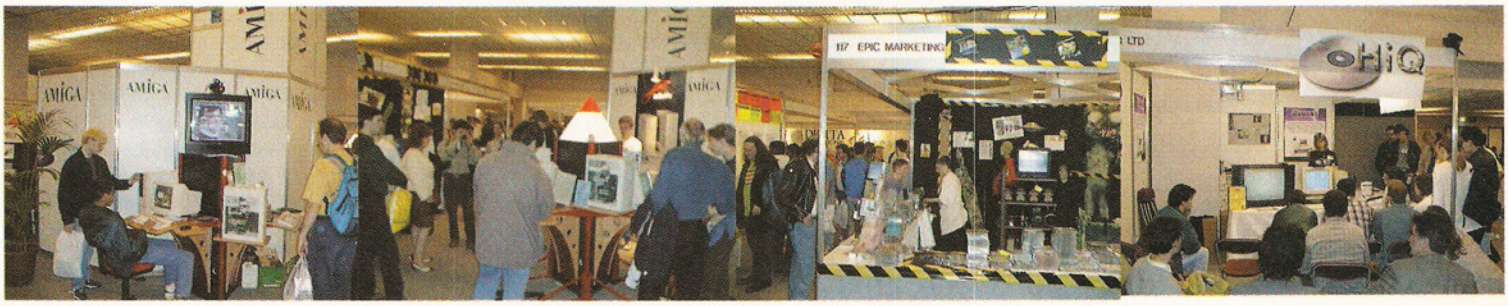
OVERALL VERDICT: A bit flawed, only for experts.

78%

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STFax Professional

SOHO comes to the Amiga – big style. **Ben Vost** gives you the lowdown.

You may not have heard of the term SOHO as it's a buzzword created by the computer media (not us, I hasten to add) to describe people who work for themselves from home or telecommute. It stands for Small Office/Home Office, and you can find a wide and varied range of products that appear to have been specifically intended for SOHO use. *STFax Pro* fits that bill beautifully, as long as you have a fairly decent modem.

> Imagine having a raunchy greeting message for your girlfriend but a nice polite one for your grandma...

If you have an old 28.8K fax modem, like the Supra or Sportster, then you'll only be able to make use of some of *STFax*'s features. All the same, at thirty quid it's still excellent value for money for "just" a bit of fax software.

However, if you have one of the current generation of voice modems then you'll probably have been champing at the bit waiting to make use of those nice voice features and that's where *STFax* really shines.

STFax actually has three modes of operation. It can be used as a pseudo-fax machine, as a voicemail system and as a BBS. The BBS side of things allows you to let other modem users ring your line and actually connect directly to a BBS on your machine. It's not all-singing and dancing, but it can provide that essential patch file to people who really need it and who don't have an Internet connection.

The fax side of things is straightforward enough and the author has been thoughtful enough to include a Workbench printer driver so that you can print directly from your applications. This always results in a much better looking fax than printing out on your printer and feeding it into a real fax machine does. This is because *STFax* takes the output from your program and turns it into a big bitmap immediately, bypassing the scanning operation a fax machine has to do.

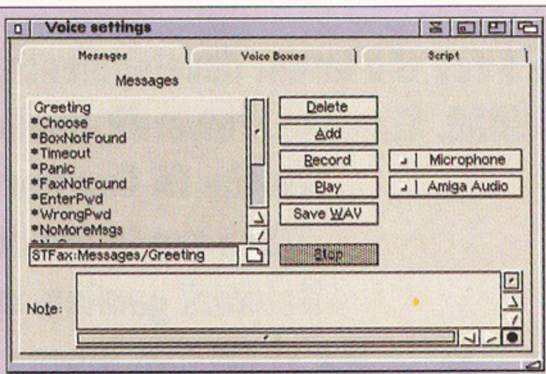
STFax supports all currently available fax types and modes and does so with aplomb. If you really want to, you can also edit and create your own faxes inside the program. Although this has been quite well done, I would suggest it's a bit unnecessary since the pseudo-printer driver is so good.

It's the voice aspect of *STFax Pro* that is really interesting. There are a lot of misconceptions about just how voice mail works and what it can do for you, but *STFax*'s online help is very good at explaining the differences between a voicemail system and a straightforward answerphone service, and when you start to investigate *STFax*'s features you'll soon understand those differences too.

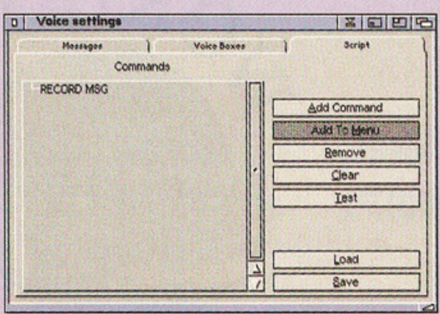
SETTING UP A VOICEMAIL SYSTEM

One of the nicest things about *STFax Pro* is just how easy it is to set up a voicemail system. Using the "Voice Settings..." menu item, this window on the right pops up and lets you record your outgoing messages through the microphone on your voice modem, or even by loading a pre-existing sound sample. You can then set up as many voice boxes as you need, which can be played back remotely if given the correct password when you call home. Your last step is to actually lay out your script. Even if you're the sort of person who hates reading the docs, you shouldn't have a problem working out what each of the script commands does. However, the docs are full of good advice for those setting up a voicemail system for the first time, so it's definitely worth your while.

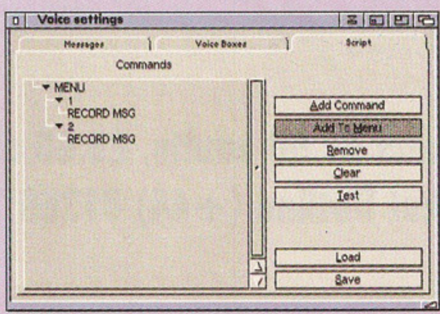
As you can see from the screenshots, you can also test out your script without having to have an additional phoneline, but this isn't perfect since you won't be able to test things like fax on demand this way.



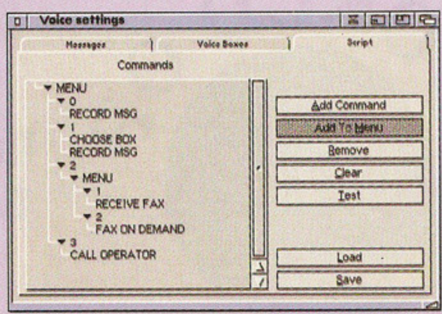
You have a variety of choices when it comes to inputting your messages, including being able to load an existing sample.



A dead simple script like this one can act just like an ordinary answerphone, using just a message and a beep.



Slightly more complex, this script greets the caller, then asks them to press either one or two on their phone to leave a message in either voicemail box.



A script can be far more complex though, with multiple options for business use, including things like fax on demand.

PLAN 1

When you are making your own voicemail system, make sure you plan out what the messages are going to be before you grab the mic and start speaking. Having a script will really help. We've done an example for you to modify for your own use, based on a fictional company called ACME.

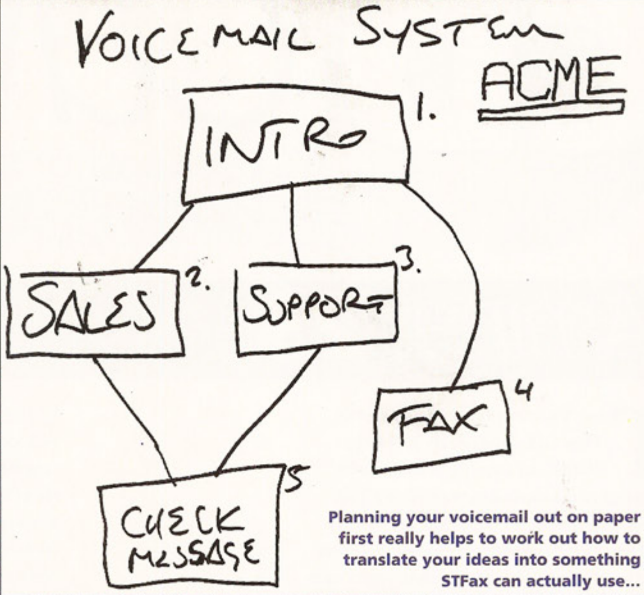
STEP 1. "Welcome to the ACME voicemail system. If you wish to speak to sales, press 1. If you wish to speak to support, press 2. If you wish to leave a fax or receive a fax then press 3."

STEP 2. "You are through to Sales. We're afraid that there's no-one here to take your call right now, so please leave a message for us after the beep. After you've left your message you can press the hash sign on your phone or simply hang up. Here comes the beep."

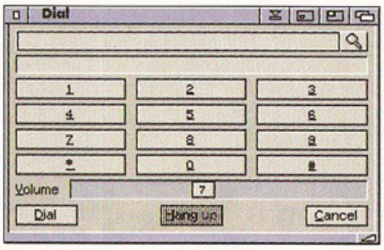
STEP 3. "You are through to Support. We're afraid that there's no-one here to take your call right now, so please leave a message for us after the beep. After you've left your message you can press the hash sign on your phone or simply hang up. Here comes the beep."

STEP 4. "You are through to ACME's faxback system. Choose your option. To receive a fax about our XP100, press 1. To receive a fax about our FD357, press 2. To receive a fax about our TF562-017/Y, press 3. If you wish to send us a fax, press send on your fax machine now."

STEP 5. "To listen to the message you have just left..." and so on.



Planning your voicemail out on paper first really helps to work out how to translate your ideas into something STFax can actually use...



The dial window is for use with a voice modem to give you a virtual telephone.

At its simplest level, *STFax* can directly replace your answerphone. A greeting is followed by a single beep and the caller is away. However, doing this is to miss out on some of *STFax*'s greatest features.

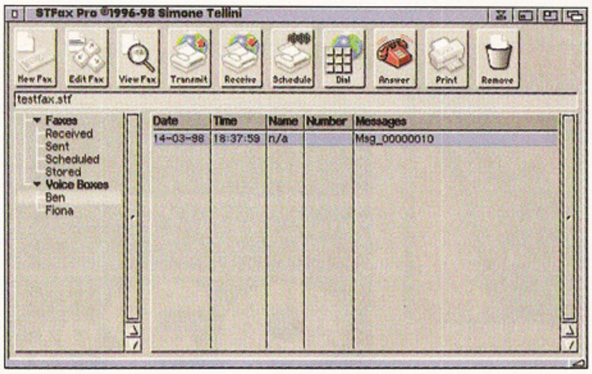
If you are using a modem that supports UK Caller ID (the Pace we reviewed in the previous issue is about the only one I know of), then *STFax* can personalise the greeting message for that user. Imagine having a raunchy greeting message for your girlfriend but a nice polite one for your grandma when she calls, or one that addresses your friends by name. Spooky, eh?

Not only that, but you can have as many voicemail boxes as you choose, and even offer a fax on demand service where the caller uses the phone on his or her fax machine to call your number and, going through your voicemail system, gets to the fax on demand feature. All they do then is hit the receive button on their fax to get some nugget of wisdom straight from you without any intervention on your part.

My only regret is that I didn't receive this software in time for our business feature back in *AF107* because I would have highly recommended it as a first purchase for budding businessmen. Even if you only have one phone line in your home business, you can make your operation seem a larger, more professional concern, all with something that costs little more than your average Shareware registration.

Not everyone is going to need this product, and even those who think they do will end up winding up their friends and family with interminable voicemail options and mailboxes for everyone, including the cat.

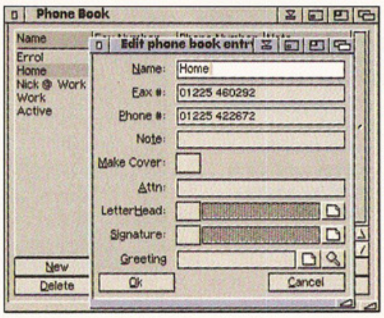
This kind of playfulness will soon wear off though, and those who are using *STFax* for its intended use will find it a godsend. If you have a voice modem then you should do yourself a favour and ring the number listed in the verdict box right now.



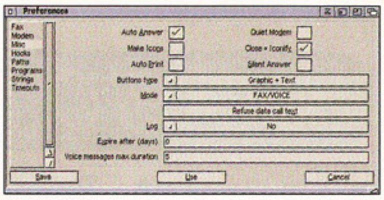
The main interface for *STFax* is clear, simple and you can remove the BBS part of the the listtree on the left if you aren't going to use it.



Faxing is easy with *STFax* thanks to its built-in pseudo printer driver. This fax was made with *PageStream*.



The phonebook gives you the fax or voice number where appropriate.



Extensive settings meet every need.

DISTRIBUTOR: Active Technologies (01325) 460116. **PRICE:** £29.95.
REQUIREMENTS: Fax modem, HD, 4Mb Fast RAM. Fast processor, voice modem, fast serial port recommended.

SPEED: ●●●●○
Modem response seems a bit sluggish, but otherwise good.

MANUAL: ●●●○○
Only online docs, but they are good.

ACCESSIBILITY: ●●●●●
Dead easy to set up and use.

FEATURES: ●●●●●
Absolutely superb. If I could give six stars I would.

VALUE: ●●●●●
Cracking value for a superb product

OVERALL VERDICT:
As good a bit of software as I've seen for a long time.

95%

CD Cavalcade

It's been a while since **Amiga Format** reviewed any other people's CDs – **Ben Vost** checks out the latest

Aminet 23

The Aminet saga rolls onwards. This CD apparently has over 960Mb of uncompressed new material on it and also includes a full version of *Turbocalc 3.5*, making it very worthwhile for all you spreadsheet fans out there. But other than that, what can you really say about the Aminet CDs?

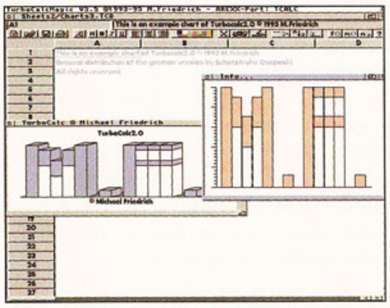
They work beautifully but they also haven't changed in many a moon. Some will say this is because they have reached a state of CD satori, others that they've stagnated a bit, but either way, it does appear at a first glance that you can treat any Aminet CD as merely a resource and nothing more.

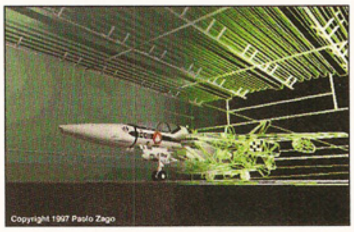
Although the CDs offer facilities like automatic decompression of archives and the like, they have about as much soul as the ftp sites which the material is originally uploaded to.

All the same, this CD manages to have nearly 640Mb stacked on it and is as easy to use as previous copies.

Aminet Set 6 should be out by the time you read this so you'd possibly be better off getting that four CD set, rather than this solo CD, unless you'd really like to get your hands on *Turbocalc 3.5*.

If you get our CD edition, there probably isn't a lot that you don't have on this disc, with the exception of .MODs, pictures of peoples' Workbenches and animations.





***Turbocalc* and the usual excellent mix of utilities, games and pictures grace Aminet 23.**

AVAILABLE FROM: Weird Science (0116) 2463800
PRICE: £10.99

OVERALL VERDICT: Competent but dull.

85%

Backgrounds Unlimited

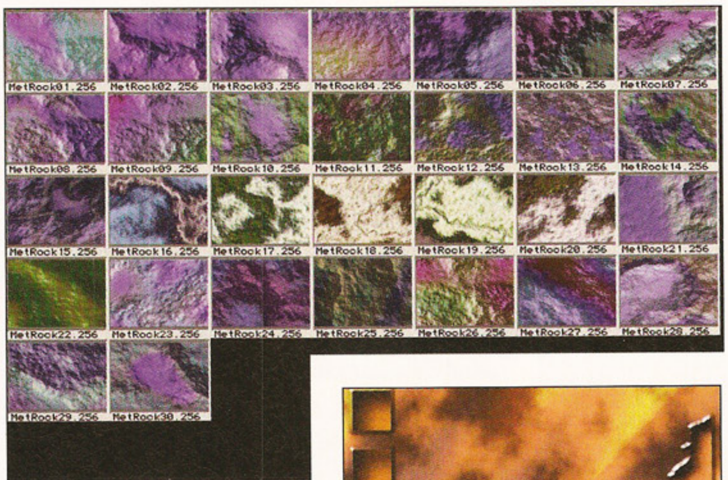
Way back in *AF85*, we gave Phase 4 a whopping 96% because it was simply the finest collection of backdrops available for *Scala* users anywhere, beating all those Shareware collections of hastily scanned material hands down.

Demand was so high for Phase 4 and related collections that EMC decided to create *Backgrounds Unlimited* – again, a CD with backgrounds for *Scala,* but this time just the backgrounds. There are no extraneous materials on this CD – no fonts, no clipart and no animations. There are only the backgrounds, all sorted into directories which roughly give you an idea of what to expect.

These textures are all designed for PAL overscan screens of 736x566 and have a palette offset to allow for the standard *Scala* palette scheme, giving you maximum flexibility. However, American readers shouldn't be put out since all the textures on the CD are also available in NTSC overscan and JPEGed at their original size of 800x600.

The quality of these backdrops is outstanding and it often looks as though there are far more colours on-screen than the 248 used.

You can have a look at a demo of both this CD and *Safari Gold* on our *AFCD25* (in the -Seriously_Amiga-/Commercial drawer) if you can't see the quality of the backdrops from the pictures on this page. I strongly urge anyone with an interest in graphics, and specifically in DTV, to get this CD.





Full thumbnailing and glorious colours mean that this background CD is ideal for anyone with *Scala*.

AVAILABLE FROM: EMComputergraphic (01255) 431389
PRICE: £39.99

OVERALL VERDICT: Gloriously colourful.

93%

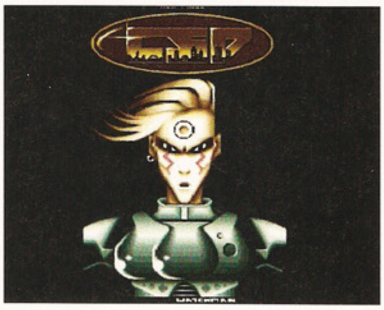
Scene Archive CDs **volumes 1-4**

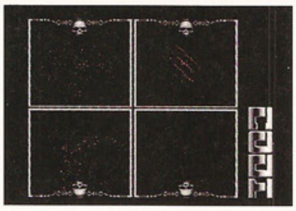
The Amiga "Scene" is still almost as vibrant today as it has ever been and the body of work produced by the sceners is amazing.

This collection of four gold CDs is the work of one such scener and gathers together such classics as *Nine Fingers* and *Spaceballs*, along with newer classics from TBL and others to form a comprehensive guide to their work.

The discs aren't brilliantly organised as they are mainly DMS files which require no icons. Some of the filenames are also ridiculously long, but especially if you are running a BBS, the simple layout used means that although finding what you want might be a bit of a chore, actually getting to it is simple.

Another problem with the organisation of the CD is that the numbering system used for the DMS files in the collection is completely arbitrary and based solely upon the compiler's own collection of disks. This means you'll have no idea what disk 1147 on CD 2 actually is until you unDMS it, or search through the guide files to determine what you've found (it's a couple of Eric Schwartz anims as it turns out) which means that you always have to go the other way, from guide to file.





Whizz, zoom, flash, boom – the four essential components of any self-respecting megademo.

Moving onto the guide files themselves, they are obviously a labour of love that the CD compiler has taken great pains over. Not only have you got the thousand-odd disks listed by group, you also have them by type and then subsorted by group or item name.

These three guide files alone are worth their weight in gold if you are a scener, although they'll obviously become progressively out of date. It would have been nice to see even bigger guides that listed everything from their CD, and from all of their the previous ones. That way, you'd only need to look up the latest guide file to see what disc the files you wanted were on.

Also, the choice of plain Multiview for these AmigaGuide files is okay, but not exactly easy to search through.

Perhaps offering an alternative, such as a database or even a version of Multiview which allows searching would have been more useful. After all, there really are a large number of entries to get through here.

Aside from this minor niggle, and the seemingly irrelevant "How to repair hardware" guide which deals with things like CD players and desk lamps, this set of CDs is going to be pretty useful to any person running a BBS into the scene.

AVAILABLE FROM: Tony Hasselbacher, 96 Robinson Road, Morley WA 6062, Australia. email: hweight@iinet.net.au
PRICE: US$15 (or AU$25) each or US$50 (AU$85) for all four. P&P included.

OVERALL VERDICT:
Not brilliantly set out but highly comprehensive.

82%

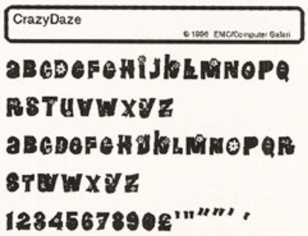
Safari **Gold**

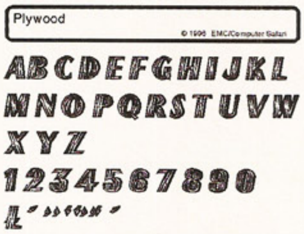
AMIGA GOLD FORMAT

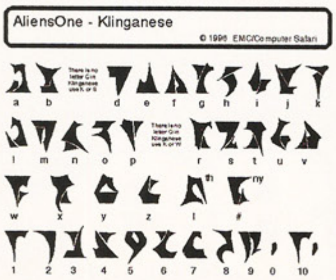
EMComputergraphic have a reputation for decent CD-ROM discs, and yet *Amiga Format* has never reviewed their later output, namely this CD and Background Unlimited. We intend to rectify this astonishing oversight this month with a look at both.

Safari Gold isn't like the Phase series of CDs from the same company. While the font content on those is good, it is also culled from the Internet and BBSs all over the world. The fonts on those CDs are Shareware so they don't have the same attention to detail as a commercial font. You quite often find characters missing or problems with *PostScript* output using them.

The fonts on this CD, by contrast, are all commercial. EMC linked up with Computer Safari (the designers) quite some time ago to offer the best *PostScript* type 1 typefaces on the Amiga. This CD not only offers you *PostScript* fonts but also *CG, TrueType* and bitmapped versions to make sure you have exactly the right font format that you may need for any occasion.







Whether it's *Star Trek* fonts you're after, or some beautifully designed display faces, this CD has exactly what you'll need.

As with all EMC CDs, you don't have to blindly install these fonts on faith. In addition to a printed handbook showing the typestyles, there is also a previews drawer on the disc should you not have the book to hand. However, this is quite hard to navigate since all 91 fonts are represented in a single drawer. Perhaps it might have been better to split the drawers up by name first.

Anyway, the content of the CD is excellent. That counts double if you think you're a *Star Trek* fan since all nine fonts used by the multiple TV series' and movies, plus alien alphabets, are offered on this CD. Their names have been changed to prevent legal wrangles with Paramount, but they are vector-perfect.

The remaining offerings form a mix of display and body styles, although added weights for some of the fonts would have been nice. Also, the fonts themselves don't seem to be cutting edge design – you won't find Neville Brody or the Designer's Republic salivating over the contents of this disc (well, maybe the *Star Trek* fonts as they sit on the sofa with their Spock ears on, watching a rerun of the original series).

This is probably for the best, actually, as font styles like the nineties equivalent of "Stop" and "Blur" come into and go out of fashion very rapidly.

AVAILABLE FROM:
EMComputergraphic (01255) 431389
PRICE: £39.99

OVERALL VERDICT:
Lots of unique typefaces on here.

92%

Ultimate Blitz Basic

Long term AF Review

Gareth Murfin talks about one of the most versatile programming languages for the Amiga.



The idea of *Blitz Basic* on a CD is a good one right from the start. A CD packed full of example source code, help documents and, of course, an improved version of *Blitz Basic* should sound very appealing to both an experienced *BB* programmer and a beginner. But is this what *Ultimate Blitz Basic* actually offers?

Well, it's a bit of a mixed bag. On the one hand there is lots of interesting source code and examples as well as the latest *Blitz* related software from the Internet, and even all the *Blitz* magazines and the support suite.

> "... even after two years, Blitz Basic is one of the most versatile programming languages available..."

On the other hand, there's no booklet, the CD is badly put together and it's the same old version of *BB* that was released on floppy disk years ago.

The actual content of the CD is superb and if some time was spent arranging, tidying and fixing the files then the whole thing would have been a lot better. For instance, the CD itself hasn't even got an icon and after double clicking the default icon it is clear that nobody has even bothered to arrange the sub directories neatly and then snapshot them!

Some of the text guides need new default tools assigned to them because the supplied ones don't work and some of the source code doesn't even compile properly.

I suppose that the compilers of the CD would argue that if someone is buying it to do programming then they could surely navigate their way around a CD without the icons being perfectly arranged, and they could also change a few default tools and print off the manual if they need to.

However, the point is they shouldn't have to as the CD should be arranged for ease of use and stability and the booklet should be supplied in hard copy like it was with the floppy disk release a few years ago. However, there is an offer included in the box to send off for the original booklet for £4.99, which I strongly recommend.

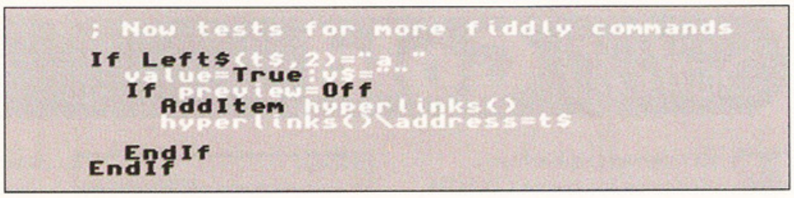
On the whole, I think that *Ultimate Blitz Basic* is a good CD for experienced programmers who have some previous knowledge of *Blitz Basic*, although for beginners the omission of a hard copy of the booklet is almost criminal.

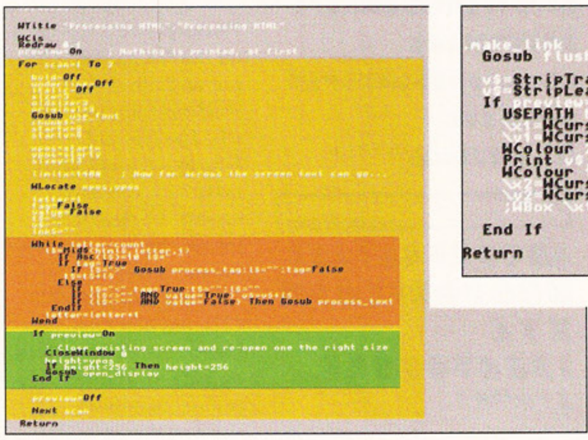
If you're happy to print off the guide from the CD and persevere with it for a while then you should find *Ultimate Blitz Basic* very rewarding.

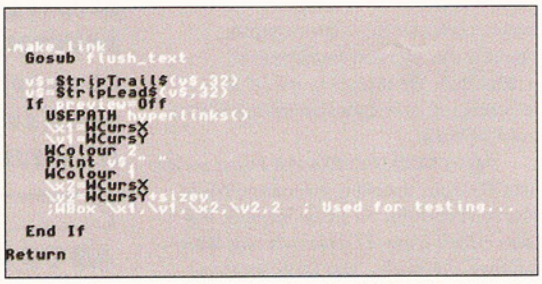
After all, even after two years, *Blitz Basic* is one of the most versatile programming languages available on the Amiga. You never know, you could be the next Andy Davison.



Blitz Basic can be a very useful package for more experienced users...







... although not much of this will make sense to beginners who don't have a hard copy of the *BB* manual.

YOUR REVIEWS

Have you got any software or hardware you couldn't live without? Got any that you'd happily chuck in the bin? Write a fair and accurate review of about 750 words and you could see your work appear in *AF*!

We will also need some good photographs of the hardware under review and a passport photo of you. Send your reviews to: *Amiga Format*, Long Term Review, 30 Monmouth Street, Bath, Somerset, BA1 2BW.

BEN'S VERDICT

It's a shame that some people don't put as much effort into creating their CDs as they should, but having said that, *Blitz Basic* is worth getting in almost any form, especially as it's not too expensive. These re-releases from Guildhall are an excellent way to get hold of things that you've missed, and at a very reasonable price. I look forward to receiving loads more *Blitz Basic* submissions for our CD very soon now.

ULTIMATE BLITZ BASIC
DISTRIBUTOR: EPIC MARKETING
0500 131486
Price: £19.99

OVERALL VERDICT:
An excellent language and extras, thrown haphazardly onto a CD.

80%

ShopWatch

Amiga Format brings you the first in a monthly directory of stores stocking Amiga products.





Tell us where you buy all your Amiga hardware and software and you could win some!

Do you ever have problems finding that essential piece of hardware or software? Then this is just what you need – the *Amiga Format* ShopWatch.

Each month we will bring you details of the best places to buy Amiga products, both in the UK and overseas. If you run a shop or want to tell us about your local store then please send us the details. You could even win a prize for doing so!

AMIGADEALS,

196 High Road, Wood Green, London, N22 4HH, email: amigadeals@ndirect.co.uk
Hardware, games, books and software.

DART COMPUTER SERVICES,

105 London Road, Leicester, England, LE2 0PF, email: dartsales@dacomputers.demon.co.uk
+44 (0) 1162 470059.
Spare parts, components and repairs.



P.D. WORKS,

Unit 13, Market Hall, Rugeley, Staffordshire, +44 (0)1976 296407

The wide range of Amiga products at P.D. Works.

D. J. SOFTWARE,

216 Paget Road, Erdington, Birmingham, West Midlands, B24 OJJ. For enquires, email: enq@d-gennoe.demon.co.uk
+44 (0)121 3827227. Hardware and software vendor.

THISTLE SOFTWARE,

Sales Office, 22 McEwan Crescent, Drumley Park, Mossblown, Ayr, Ayrshire, KA6 5DR, Scotland. www.ayrshireonline.com/thistle.html
Company based in Scotland specialisi in Amiga compatible CD-ROMs.

FIRST COMPUTER CENTRE

Unit 3, Armley Park Court, Stanningl Road, Leeds, LS12 2AE, email: Sales@firstcom.demon.co.uk
+44(0)1132 319444. Amiga mail order company.

GOLDEN IMAGE (UK) LTD

65 HallMark Trading Estate, Fourth Way, Wembley, Middlesex, HA9 0LB, email: enquiries@goldenimage.co.uk
+44 (0)181 900 9291. Specialist importer and distributor of compute related products.

SEVENTH HEAVEN COMPUTERS,

19 Old Market, Wisbech, Cambridgeshire, P13 1NB, +44 (0)194 589526.

SOFTWARE FIRST,

Unit 6, Capricorn Centre, Cranes Farm Road, Basildon SS14 3JJ, email: sales@softwarefirst.com +44 (0)1268 531222. Software specialists.

X-ZONE,

www.x-zone.demon.co.uk
An online Amiga game shop in the UK.

GAMES GALORE,

Queen Square, Wolverhampton, WV1 1TQ. +44 (0)1902 717474.

THE COMPUTER SHOP,

116 Albert Rd, Devonport, Plymouth, PL2 1AF, +44 (0)1752 607080. Repairs.

STEWART ELECTRONICS,

85 Penny Meadow, Ashton-Under-Lyne, Lancashire, +44 (0)161 3390504.



Workbench

This month's hardware and software problems were solved by John Kennedy's cat. Send all your questions to: **Workbench • Amiga Format • 30 Monmouth Street • Bath • Somerset BA1 2BW.**

WOLF IN SHEEP'S CLOTHING

I have an A1200, Blizzard RAM card with 4Mb (soon to be 8Mb) a Citizen ABC24 printer, a 170Mb IDE hard drive and a RocTec external FDD.

I've recently been given an old Epson PC which I'd like to utilise to tidy up my Amiga by using the desktop casing and PSU. I've no intention of moving the motherboard, hard drive, etc, which are quite alright where they are as far as I'm concerned.

buffered interface and was hoping to add the PC's hard drive as a slave, but your comments about having to know which jumpers to set rather scuppered that one as I don't have the manual for either hard drive. Instead I would like to fit the PC one in place of mine as I understand it is a larger capacity, but the interface connectors are flat (male) SIMMS-type, as opposed to the pins on my existing HDD. Would Eyetech be able to supply an adaptor of some sort?

Will a PC IDE CD-ROM drive fit in the bay vacated by the old 5.25" floppy drive? Is it still possible to get a switchable parallel port interface so I can leave both my printer and frame grabber connected? If so, where from?

F.J. Hudson
Derby

Amiga power supply plugs are non-standard and therefore have to be made especially for the Amiga. As a result they are rare. Perhaps the only way to get hold of one is to buy a second-hand A500 or A600 and then butcher the power lead.

Yes, you do need to know jumper pin positions. However, the manufactures of hard drives don't want to hide the information and if you contact them they will tell you. Most operate fax lines, Web sites and dial-up BBS numbers for this purpose, so don't be afraid to contact them.

Hard drives do not have SIMM-type connector cables. Nothing like this exists. If they are different from your existing hard drive then we can assume the drive isn't IDE but some other ancient variant. This is peculiar as you imply it's larger than 170Mb, so it couldn't be that old.

However, sadly, unless it happens to be SCSI this means it is probably next to useless.

Yes, a CD-ROM drive should fit into the bay if there isn't another one free. And yes, you can buy a printer switcher from most high street computer shops. It's simply a box with a big knob on the front. You'll need to get some more cables as well.

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Philip Fox
Blyth

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AMIDON'TSEE

I recently bought a Kodak DC25 digital camera after reading the article on the same in the December issue of *Amiga Format*. Before I set out, I checked that I had a copy of the *AmiDC* software (version 2 included on *AFCD21* and *22*) needed to download the images.

When I got the camera home I found that although it worked alright (the pictures are displayed properly at the back of the camera at least) the *AmiDC* software didn't.

At first, using the settings (9600 baud, etc) mentioned in the documentation, the program did nothing, but with a little perseverance (adjusting to 19200 baud, no handshaking, no parity, 8 bits/char and 1 stop bit) I managed to save the images.

Unfortunately, on viewing the images (using *PPaint 7.1* and *PPShow*) I found the sky was white and just about everything else was black. Could you please tell me:

1. How the author of the *AmiDC* software can use baud rates of 38400, 57600 or 115200 on his A4000 when, according to the manual and the computer, the highest setting is 31250?
2. Why does the software tell me that I have taken standard resolution pictures when I know they are high resolution?
3. What do I have to do to make this program work properly?
4. Where can I get hold of the relevant Mac software to make Shapeshifter work and so make use of the programs which came with the camera?
5. Who supplies the third party software



Picture perfect? The Amiga software for digital cameras is quite experimental and some bugs should be expected.

PC FORMAT?

Is it possible to connect PC accessories like hard drives, scanners, CD-ROMs, etc, to the Amiga? The reason I ask this is because I wanted to get a recordable CD for my Amiga after the feature you did on them a few months back. I started to save up all my spare cash to get one. Then I received a PC magazine through the post and saw they were selling the exact recordable CD you reviewed for nearly half the price you stated. I'd like to know if it is possible to connect PC drives and accessories to an Amiga. If it is possible, how do you connect them and where can I get someone to fit them or sell the parts?

Nick Abbott
Doncaster

Yes, it is possible to use PC peripherals, and IDE hard drives and CD-ROM drives are perfect examples. However, when you look at the price of a PC peripheral don't start salivating immediately because there may be various items required in order to get them working with your Amiga. Take the CD-R drive as an example. You might have seen it advertised at a very low price and I'll bet it even comes with software too. Unfortunately, that software is going to be PC only so you'll need to buy an Amiga version. The drive itself will probably use SCSI so you'll have to price a suitable interface for your Amiga. What if it doesn't work as you expect? Who are you going to call for advice, the PC helpline?

There are some PC hardware bargains around, but the Amiga versions are rarely overpriced for the sake of it and there are traps for the unwary.



Be wary of the apparent cheapness of PC peripherals compared to identical Amiga hardware as there are often many hidden costs.

which was mentioned in the article in the December issue (*AF104*)?

P. Wilcockson
Scunthorpe

1. *I doesn't know how it is possible to use baud rates 38400, 57600, 115200, I just know they work. There is no such rate as 31250, at least as far as the Amiga's operating system is concerned.*
2. *There is a bug in the program. Information on how the DC25 works is still sketchy and there is a lot of guess-work involved. Kodak don't release this kind of information and it's all picked up by experimentation. Sometimes it doesn't work. In the author's experience, standard resolution mode is useless anyway.*
3. *Re-write it? Wait for a bug-fixed version? When I have the time, I hope to fix a few of the bugs (there are worse ones, believe me, especially if you are using the non-FPU version) and put a fixed version on my Web site (http://www.sticky.net) and, of course, on the* AF *coverdisk. In the meantime, I apologise for any inconvenience caused. You can hassle me directly via email at amidc@sticky.net if you want to.*
4. *To make* Shapeshifter *work you need a Mac ROM image. To do this you will need access to a Mac. Instructions are provided with Shapeshifter on transferring the ROM image to the Amiga. Bear in mind that, legally, you will need to own the Apple Mac. You'll also need a copy of the Apple Operating System.*

Again, this is copyright, but it's possible to buy it from Apple dealers. A version was also available on the Apple FTP Internet site.

5. *Unfortunately the company that was writing the software weren't getting paid so development was stopped. Power Computing are working on a suite of software for a range of digital cameras, hopefully including the Sharp Digicam.*

AMIDC

I went out and bought the Kodak DC25 Digital Camera worth £200.00 following the *Amiga Format* article on digital cameras for the Amiga.

I have been having problems with your digital camera software, *AmiDC v2.0*, which was included on *Amiga Format AFCD22* (*AF106*, January 1998).

What happens is that when I connect the digital camera to the Amiga and run your *AmiDC v2.0* program it reads the camera details and understands that I have got the Kodak DC25. However, it says I have one standard image when I have one high image and when I have one high image is says I have one standard image.

I then click on the Fetch button and it downloads the image from the camera, converts it and saves it to the directory that the *AmiDC v2.0* is located in, as dc-001.iff.

I then load *Personal Paint V. 7.1* and load the image that has been saved in the *AmiDC* directory dc-001.iff.



Can you connect your scanner to your Squirrel? Of course you can. You just need the right software.

I then wait for *Personal Paint* to load the image in and, when it has, the image is just a dab of red blotted on the screen with a bit of blue with a black background. What happened to my picture? You can not make out what the picture is and it is not even a proper picture so something isn't working right and I think it is the *AmiDC* software.

Kevin Sapwell
Croydon

As it said in the article, AmiDC *is a work in progress. The symptoms you mention are bugs in the* AmiDC *program. As it stands, AmiDC gets confused when displaying the number of high and standard resolution pictures on a DC25. It can't read images stored on a plug-in PCMCIA memory card either. Most annoying of all, however, is the fact that on some non-FPU systems the picture decoding results in garbage.*

These bugs are almost all due to the fact that trying to get information on the DC25's serial protocol is next to impossible. Kodak won't release the information and the only way to discover it is to experiment with a real, live camera. The garbage images are a result of a bug introduced when trying to use StormC *to compile a program originally developed under* SAS/C.

I'm trying to fix these bugs and when I do the updated program will be uploaded to Aminet, my Web site (www.sticky.net) and also placed on the AFCD. *In the meantime, here are some tips:*

Ignore the display when it tells you the number of images used. High resolution and standard images will download and decode, no matter what the display says.

If you only get garbage when you decode images, trying using a different version. If you don't have an FPU on your system then try to use the camera on an Amiga which does.

A fixed version will be made available as soon as possible, workload permitting.

GRAPHICAL GRIPES

I would appreciate your help with a couple of graphic-related problems. I have an A1200, '030 with 18Mb and a 2Gb hard disk.

1. I recently downloaded a couple of Jpeg graphic files from a WWW site but when I tried to view them using *Fastview*, an information requestor with the message "Unsupported SOF marker type Ocx2" appeared.

The same message appeared when I attempted to convert the format of the files contained in *Image FX1.5*. The files contain the following information: "JFIF Photoshop 3.0.8BIM. File written by Adobe Photoshop 4.0".

Is there any way I can view the images on an Amiga or convert them to another format?

2. My system includes an Epson GT 8500 flatbed scanner which was bundled with *Powerscan Professional* and has both parallel and SCSI ports. I bought the

Continued overleaf ➡

scanner with a parallel lead, not having a SCSI port at the time.

I now have a Squirrel interface and CD-ROM and would like to daisy-chain the scanner. The Squirrel does not include any software for using a scanner directly and relies on third party device drivers. *Powerscan* apparently does not have a SCSI device driver. Is there any alternative software which does, or any other source for such a driver?

K. Blythe
North Shields

1. *There are Jpegs and there are Jpegs, and sadly they aren't always the same.* Photoshop 4 *has the ability to save Jpegs with integral thumbnail images and other information and this can stop other applications from loading them. This isn't an Amiga-specific program as applications on other platforms can have problems too.*

There isn't a lot you can do I'm afraid, except keep looking for Jpeg datatypes and hope that one is recent enough to deal with the new information, or try to find a PC or Mac owner who will resave the files for you.

2. ScanQuix *is the software you and others need to be able to drive Epson scanners (amongst others) through SCSI. You can get it from Eyetech on 01642 713185.*

10 things to do when: You want your Amiga to go faster.

1. Install your software properly. Many people have a hard drive but still launch applications from floppy. Install them on your hard drive and they'll whizz along.

2. Make the most of the RAM disk. Reading and writing to memory is much faster than using a disk drive, so store as much information there as possible. Remember than the contents are lost when the Amiga is reset or switched off.

3. Use RAD. RAD is the recoverable RAM disk which can withstand a warm reset. You can use it to store the core Workbench, and so the Amiga will re-boot from it rather than reading disk information. It's fast but it will consume a lot of your free memory.

4. If you have an accelerator, try the ROM Shadowing option. Reading from RAM is faster then reading from ROM, so if the Kickstart ROM is copied to RAM first, it can speed up the entire computer.

5. Try the NTSC trick. As your A1200 or A4000 boots up, hold down both mouse buttons. Now press space to toggle to NTSC mode. If your display is stable, try running games – you might find they run making more of the screen and are slightly faster.

6. Be frugal with colours. A 256-colour Workbench will crawl along compared to a 16-colour Workbench, unless you happen to have a graphics card.

7. Organise your directories properly. If you have a directory with 100 files it will take ages to list them all. Create more drawers (sub-directories) and keep the files in there instead.

8. Look after your disks. Regularly check for errors and defragment them. A defragmented drive will keep files together, allowing them to be read much more quickly.

9. Use the right version of software. If you have an accelerator with a FPU chip (that is, a maths co-processor) make sure you are using the FPU version. Similarly, if you have a 68030 or better processor, check to see if there is a particular version of the software for your hardware.

10. If all else fails, buy hardware. Fitting extra memory to an unexpanded A1200 will double its speed. Fitting an accelerator will speed it up even more. Don't buy a faster processor card and forget about getting extra memory as the speed-up will be negligible.

MEMORY OR RAM?

I own a standard 3.0 A1200 with 2Mb RAM, 80Mb hard disk, colour scanner, inkjet printer, CD³² (with Sernet, etc) and an old 1084S monitor.

As I have recently acquired a 600*300 dpi printer I have started to use *PPaint* a lot more than when I first got my Amiga in 1992. I only have 2Mb RAM and I often find that I can't print a photographic quality picture from my CD³² or scanner due to low memory.

1. Obviously I am going to have to buy more RAM anyway due to games becoming more powerful, but what is the difference between SIMM and RAM? What is the point paying up to 4 times more for RAM? What about "Softmem suite" from Epic Marketing? Does it work?

2. I am going to buy RAM anyway, but I have seen programs like *TurboPrint*, which I cannot really afford to get. Is there a PD print manager and, if so, could you give me the name of the program or include it in the Reader Requests drawer on the CD?



You should be able to connect the Amiga CD³² to a monitor quite easily.

3. Having bought my CD³² second-hand, I did not receive any manuals. Looking at the back of it I have noticed that there are various picture outputs, so is there a lead which would connect it to my 1084S when I am not using it as a CD-ROM drive?

David McCann
Radlett

1. *SIMMs are RAM. SIMMs are "Single Inline Memory Modules" and are memory chips attached to small, thin cards. They don't cost four times more than RAM as they are RAM. It's almost impossible to buy RAM which isn't in the form of SIMMs (or the new SDIMMs). I imagine Softmem is a virtual memory system. These do work (although not with all programs) but as they temporarily store data on your hard drive, they are obviously slower than "real" memory.*

2. *You don't say which inkjet you have so I can't say exactly which drivers are available, but contacting your local PD library would be a good start. However, none of the Shareware drivers match up to the quality and speed of* Studio *or* TurboPrint, *which both offer true 24-bit printing.*

3. *The CD³² has a composite video signal and that's suitable for connection to the monitor. An Amiga dealer should be able to help you source a lead.*

MISSING ENV

I have an A1200, Quantum Fireball 1.2Gb HD, second floppy drive and Amiga monitor. The problem is that I have no ENV drawer (a requestor keeps asking for it). Where do I find it?

I fitted, partitioned and formatted my HD which was when I found the problem. I also found that all my original Workbench disks had been corrupted. I bought the machine second hand. Any ideas or do I have to buy new Workbench disks?

I. Colvill
Taunton

The ENV drawer is created at start-up time by the startup-sequence. It resides in the RAM disk, making it fast and efficient for applications and the OS to access it. ENV is stored on disk in the directory ENVARC. You should have some lines in the startup-sequence file like this:

```
C:MakeDir RAM:T
RAM:Clipboards RAM:ENV
RAM:ENV/Sys C:Copy >NIL:
ENVARC: RAM:ENV ALL NOREQ
```

The first line creates the ENV directory (and some others) and the second copies the contents of ENVARC to it. If you don't have an ENV directory then these lines are missing from your startup-sequence. If you don't have

GRAPHICS ON THE CHEAP

I am running an A1200 with 18Mb RAM, Apollo A1230 Pro accelerator, 170Mb hard drive and multisync monitor. I also own two A500s, an A500+ and an A2000 (no keyboard).

After playing the *Foundation* demo on your January CD and some other demos, I feel the need for a graphics card and a faster processor. My problem is that I don't know which route to take. Either I add a cheap Zorro to my A500, update the A2000 or add an expensive Zorro board and tower to my A1200. Which would be best? Could you advise me on the cheapest route for an RTG card update?

Also, in your December issue, you gave away the excellent *Dice C*. You also promised a tutorial the next month. Where is it?

Gregor Spalding
Gairloch

There is no cheap way to add a graphics card I'm afraid. Forget the A500 solution immediately. Even if you did get a Zorro adaptor and graphics card, the advantages of the graphics card would be lost.

There is a huge need for a cheap, plug-in graphics card for the A1200, but I can see no sign of it happening. The only way you can fit a graphics card to an A1200 is to buy a tower conversion case and Zorro adaptor system and that's not cheap. Perhaps you would be better off selling your existing family of Amigas and buying a second hand A2000, A3000 or preferably an A4000.

The C tutorial has started, as you should be able to tell after flicking through this very issue.

a full Workbench installation installed onto your hard drive then that would explain it.

Buying Workbench isn't easy. It's still copyright, so it can't be given away. However, you are also unlikely to be able to ring up Gateway and ask for a replacement.

The only legal way is to buy an upgrade, such as the OS3.1 upgrade from Power Computing for £45.95. If you only want the 3.0 software which came with your Amiga, I don't think anyone is going to sue you if you got a copy from a mate or a friendly dealer.

ROOM FOR AGNUS?

The DKB Megachip is mounted on a card that plugs into the PLCC socket. Because the Megachip sits so high off the motherboard, the Mega Midget Racer won't fit into the 68000 socket.

Is there a 2Mb Agnus for the A2000 that will sit down in the Agnus socket or must I find an alternative solution?

Heyward Kerns Brunssum
The Netherlands

Try contacting Power Computing as they sell a 2Mb Agnus upgrade called the MiniMega. It looks quite small, so it might squeeze into your A2000 with room to spare. Failing that, I'm afraid you'll have to look for a CPU slot-based accelerator for your system.

GRAPHICS UPGRADE

I have an A1200 with an 8Mb upgrade as well as a 1.2Gb hard disk. My problem is that I am always using it to mess around with pictures, but I only have 2Mb of graphics memory and I'm always running out. I was wondering if it was possible to use some of my 8Mb upgrade to boost my graphics memory.

If this is possible could you tell me how to do it? If it's impossible, is there any other way to upgrade my graphics memory? I am also looking for a full copy of either *Maxon Magic* or *Desktop Magic*. Where can I find a copy?

Duncan Rix

Sorry, the 2Mb limit is absolute as it's a limitation on the amount of Chip RAM present in the Amiga. This memory is shared between the custom chips and the processor and 2Mb is as much as the graphics chips can address. You can make the most of your chip memory by running your graphics application without multitasking any other programs in the background and by turning off your Workbench. A graphics card can use other system memory to store graphics but this isn't a very cheap option for an A1200.

Although these days 2Mb doesn't sound a lot, the Amiga is very frugal and can do a great deal with it, if you make the most of it.

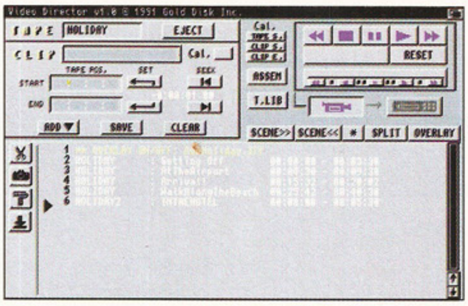
Maxon *products are distributed in the UK by HiSoft, so contact them for details.*

VIDEO EDITING

I have an A1200 with 2Mb RAM, 1Gb hard drive, Star LC-200 printer and a floppy external disk drive. What I would like to know is how do you connect a video recorder to the computer to edit videos? I have got a very old Saisho VHS VR3300X video which would not be able to use a SCART lead.

I do not have much money and would prefer not to buy any expensive equipment in order to do this.

Neil Deakin
Nuneaton



***Video Director* from GoldDisk is the perfect way to edit videos. The only problem is that it hasn't been made for years now.**

The product you want is Video Director from GoldDisk. The only problem is that they stopped making it years ago. It used a special Infrared connector to control the VCR and a LANC plug to control a camcorder. It could therefore find the clips on the camcorder and operate the pause and record controls on the VCR automatically.

These days, KRP (tel: 0141 7622510) are the only company selling similar devices, although they aren't cheap at £120 upwards and don't include any IR capabilities.

I'm slightly concerned that you don't mention a camcorder or a second VCR as you obviously can't perform tape-to-tape recording with only one deck. It would be nice to digitise the footage and store it on disk under the control of the Amiga. Scenes could be rearranged and the new film played back to tape once more.

This kind of "non-linear" editing requires a very fast Amiga and a suitable MJPEG capture card, which wouldn't work on your A1200, I'm afraid AF

IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved).



John Kennedy. And his cat.

Here are a few tips on sending in questions:

- **Be concise.**
- **Detail the problem as best as you can.**
- **Describe the events that caused the problem.**
- **Give full details of your equipment.**
- **Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.**

Bear these points in mind and fill in, photocopy, or copy the form below as best you can. Unfortunately we cannot reply personally.

Send your letters to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Your Amiga:

○ A500 ○ A500 Plus ○ A600
○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... **Mb**

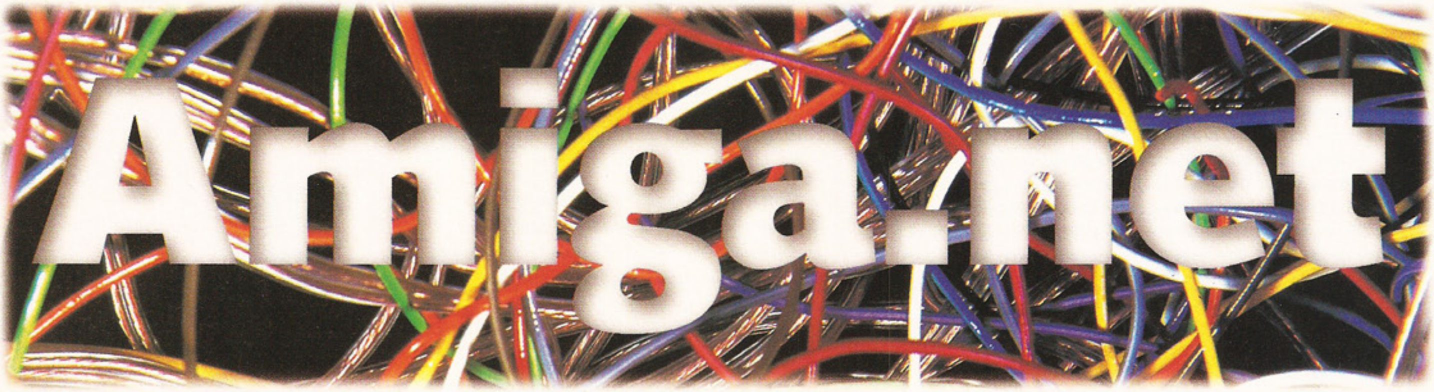
Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

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....

Details of other hardware:

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Amiga.net

Dave Cusick investigates the scourge of every email user – Spam.

CONTACT POINT

I can be reached with comments, suggestions and feedback at dave@dcus.demon.co.uk, or via my Web site at http://www.dcus.demon.co.uk/.

As little as two or three years ago, Unsolicited Commercial Email was practically unheard of on the Internet. In those halcyon days, Netiquette dictated that email messages and postings to Usenet newsgroups should not be commercial in nature, and anyone violating this rule would find themselves flamed by scores of irate Net users. Unfortunately, times have changed.

> ...estimates have suggested that as much as a third of all email sent to AOL members are Spam.

Now barely a day goes by without me finding at least two or three pieces of UCE in my email inbox, and any sortie into the realms of Usenet is lengthened through my having to sift through tedious and irrelevant advertisements which have been splurged across the newsgroups with total disregard for their genuine users.

UCE, also called Spam, is a major irritation for a variety of reasons. Firstly, it's a complete waste of time. Spam invariably advertises stuff that the average Net user couldn't care less about. I don't want to hear about the chance to buy a large quantity of kinky lingerie from a dealer in Texas, I don't want to invest in a shady pyramid scheme based in a liberal off-shore tax-haven of a country and I don't want to buy software so that I too can Spam thousands of innocent Net users.

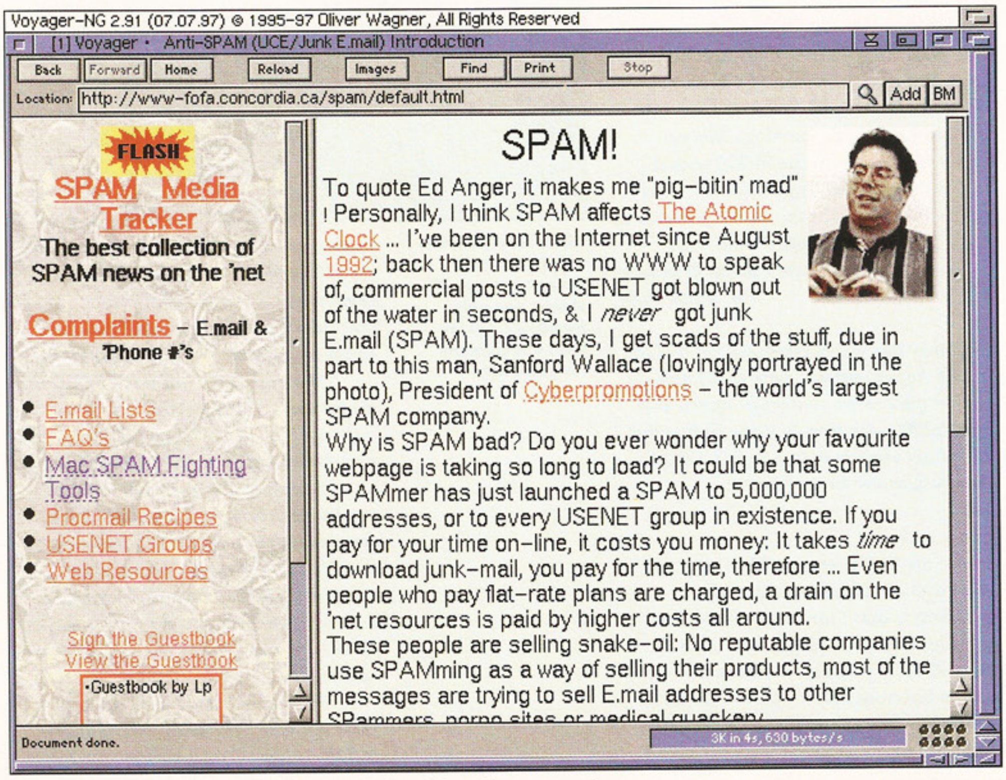
Also, sorting Spam from genuine email can take anything from a few seconds to several minutes, since it's not always immediately identifiable from the Subject line or the sender's email address, and having to reply requesting the removal of your name from the Spammer's mailing list takes time too.

Secondly, Spam costs the receiver a great deal more than the sender. Individuals such as you or I have to pay telephone call costs, and every second spent downloading email means more money wasted. By contrast, a company sending out masses of Spam each day will probably have a permanent connection to the Internet, and so the sending of an individual piece of Spam will cost them a lot less than it'll cost you to download it

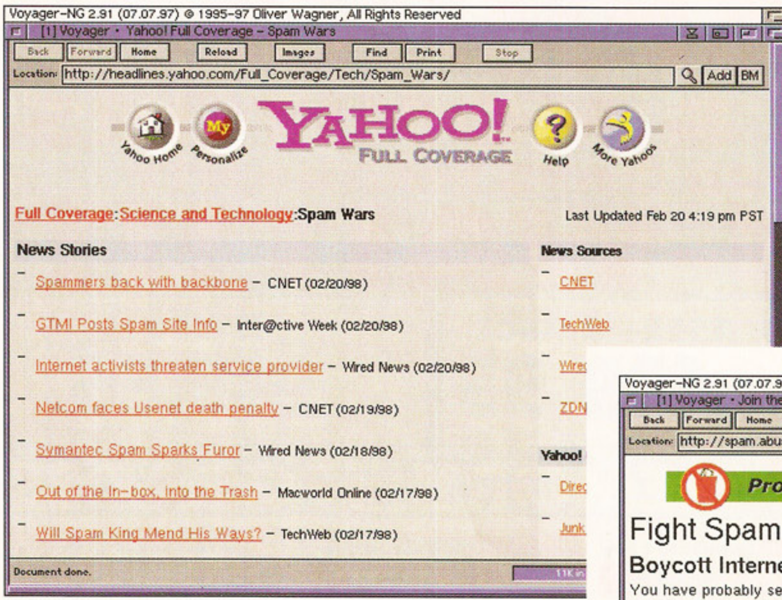
So what is being done about the problem of Spam? Well, on a practical level, most Internet Service Providers have Acceptable Usage Policies (AUPs) which their customers must follow when using their email accounts. Many AUPs specifically ban Spamming but Spammers often use temporary accounts with ISPs to unleash a few thousand unsolicited commercial emails before moving on, or else they could simply connect directly to the Internet backbone.

Unfortunately, it seems that providers of connections to the Internet backbone are powerless to kick the Spammers out, after a US Federal judge recently ruled that one such provider, AGIS, had unlawfully breached a contract by disconnecting legendary Spamming company Cyber Promotions.

Cyber Promotions is not a popular company and its president, Spam King Sanford "Spamford" Wallace, is not a well-liked man. Wallace wants his company to become a one-stop Spam shop, with businesses paying Cyber Promotions to spread the word about



Spamford doesn't get many Christmas cards from the online community.



Yahoo provides a list of links to scores of Spam-related articles which have been posted on the Web.

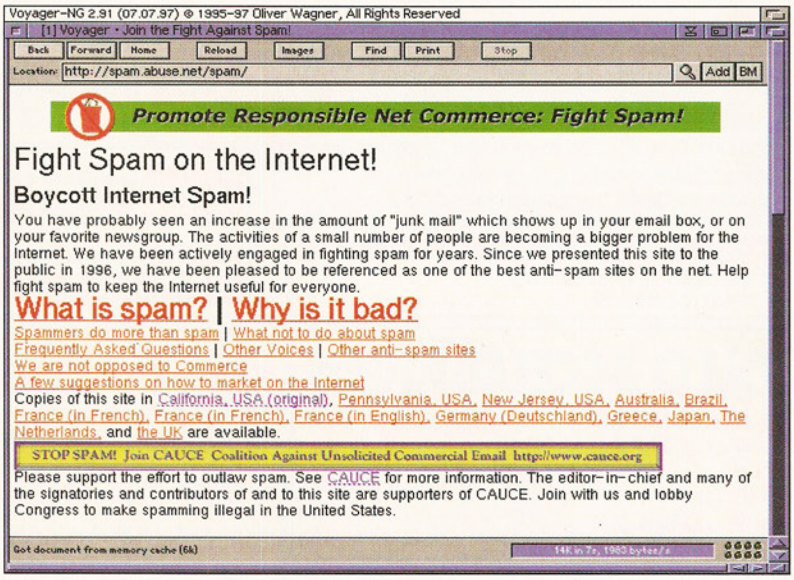
their services and prices. Spamford told CNet's News.Com: "I'm not offended at all; I have nothing to be ashamed of. I feel that Cyber Promotions' activities are perfectly acceptable and we're just a reflection of the real world except it's online." Spamford has become so hated that the Cyber Promotions site was recently hacked by irate Netizens.

It's possible for ISPs to refuse to accept messages from companies like Cyber Promotions, but the Spammers simply respond by sending their messages via alternative services, so their unwanted drivel still reaches its intended target. Also, filtering out all messages from a particular domain can stop legitimate messages reaching their intended destinations and the sheer volume of Spam makes it very hard for service providers to keep up with the Spammers. For instance, estimates have suggested that as much as a third of all email sent to AOL members are Spam.

An interesting approach to tackling Spam has recently been adopted in Canada. Since January 1998, members of Canada's Direct Marketing Association, which represents four out of five of the country's 800 or so direct marketers, will have to obtain consent from customers before they are allowed to send them Spam. But given that the vast majority of Spam originates in the United States, this development could have very little impact for you or I. The bottom line is that stopping Spam involves a degree of effort from ordinary Netizens. There are plenty of steps you can take to try to control the amount of Spam you're forced to sift through.

Firstly, you can email the postmaster of sites through which Spam has passed on its way to your system. Having a generic "I've been Spammed via your server" message on your hard drive can make this process a whole lot less painful. It's probably not a good idea to complain via email to the Spammers themselves. It's been alleged that some people who had emailed Cyber Promotions were completely snowed-under by Spam.

You can trace the routes that Spam has taken to your mailbox using *Whois* and *TraceRoute* software, which can be easily obtained through Aminet.



Fight Spam on the Internet is one of the many sites set up by concerned and annoyed Netizens to try to put an end to Spamming.

Secondly, if you're not in a great hurry and you happen to receive some Spam which contains a valid return address and instructions on how to remove yourself from the mailing list, make sure you respond. It'll take a few seconds but it may save you time and money overall.

Thirdly, take steps to avoid your name being added to Spam mailing lists in the first place. Spammers tend to use

> Spammers tend to use software to sift through newsgroups and the Web, dredging up email addresses...

software to sift through newsgroups and the Web, dredging up email addresses along the way, so the most obvious way of foiling the Spammer's efforts is to quote your email address in words (as in dave at dcus-dot demon.co.uk). You could also use a fake reply-to address, such as nospam@thanks, so the Spammers end up having their mail bounced back.

You might also want to make use of anonymous remailers so as to keep your real address secret. Finally, it is probably worth making sure that your email address is listed by as few directory services as possible. Most reputable people-finding services wouldn't dream of selling their databases to Spammers, but it's better to be safe than sorry.

If you find yourself on a mailing list, you've got two options. Firstly, if you use a POP3 account and can choose which emails to download based on their headers, you can delete messages which are obviously Spam without even downloading them.

Alternatively you can download all your email as usual and filter it into folders on your system, putting messages from known Spammers directly into the Trash directory.

Setting up filters is a simple process using a decent email client such as Microdot-II or YAM. If you fancy something more sophisticated than simply filtering out likely pieces of Spam, take a look at the "intelligent" prioritisation system offered by a piece of software called *SpamBeGone!*

This way you'll still end up paying for the time it takes to download the Spam, but at least you won't have to waste yet more of your life actually reading through the rubbish.

Lovely Spam? Wonderful Spam? Nope, it's just plain annoying.

SPAM SITES



Yahoo Spam News – http://headlines.yahoo.com/Full_Coverage/Tech/Spam_Wars/
AntiSpam – http://www-fofa.concordia.ca/spam/
Fight Spam on the Internet! – http://spam.abuse.net/spam/
The AntiSpam Zone – http://www.canismajor.demon.co.uk/antispam/antispam.htm
Coalition Against UCE – http://www.cauce.org/
SpamBeGone! – http://www.internz.com/SpamBeGone/
Stop Spam FAQ – http://just4u.com/webconsultants/spamfaq.htm
...and one for those of you with access to a Java-enabled browser: Spamford Wallace Darts – http://www.mtcc.com/~mike/wallace.html

CREATIVE

The indispensable guide to getting the most out of your software



Having cunning ideas like our new tutorial series comes naturally.

Unfortunately, I couldn't think of anyone better to write it than myself, so while I have a load more work to do, you will be learning more than you ever dreamed of about how graphics really work and how you can use them more effectively.

If this isn't your cup of tea, perhaps you fancy learning how to program in C? John Kennedy has reached part two in this series, and now you'll get to do some real programming. If you missed part one, see the back issues section on page 51.

Meanwhile, if your accelerator doesn't go as fast as it should, Simon Goodwin may have the answer in his increasingly interesting Under the Bonnet series.

Nick Veitch

SEND IT IN!

WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

PROGRAMMING

Is there a language you can't get to grips with? Or maybe you want to know how to do a specific thing n C or ARexx? You might never find the answer unless you write in and tell us about it!

PAINT PACKAGES

Unsure of how to get a particular effect? Do you think there must be an easier way? Our experts could help.

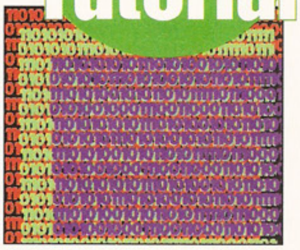
DRAWSTUDIO

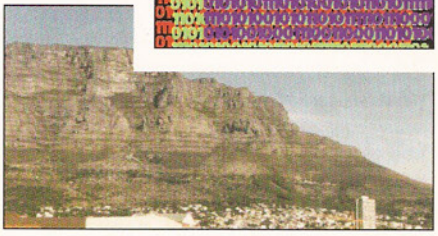
Is there something you desperately want to be able to draw? Drop us a line! Contact us at:

AF Creative • 30 Monmouth Street
Bath • Somerset BA1 2BW
Or email: amformat@futurenet.co.uk
putting "Creative" in the subject line.

NEW Tutorial







This episode is brought to you by Nick Veitch, Cameron Diaz, Cape Town and the numbers 1 and zero.


```
/* Listing Three */

#include "stdio.h"

/* declare my function */

void myfunction()
{
    printf("-------- C is great --------\n");
}


main()
{

    /* define and assign some variables */

    int a,b,c;

    a=1;
    b=2;


    /* do a sum */

    c=a+b;

    /* display the result */

    myfunction();

    printf("The sum of %d plus %d is %d\n",a,b,c);

    myfunction();

    /* that's it! */

}
```

```
/* Listing One */

main()
/* the main function, where everything starts */
{

    /* define some variables */

    int a;
    int b;
    int c;


    /* assign values to them */

    a=1;
    b=2;

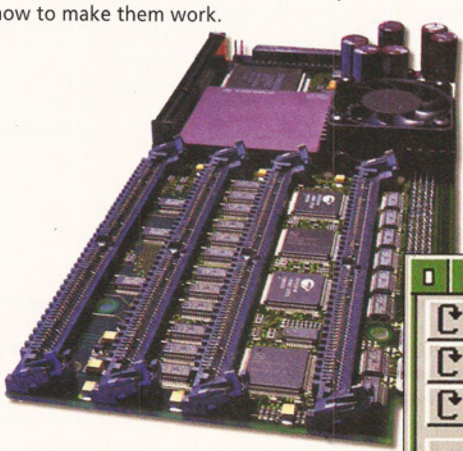

    /* do a sum */

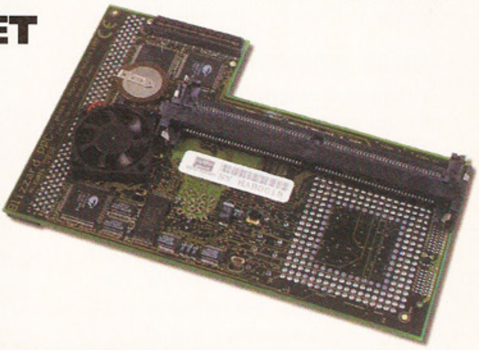
    c=a+b;

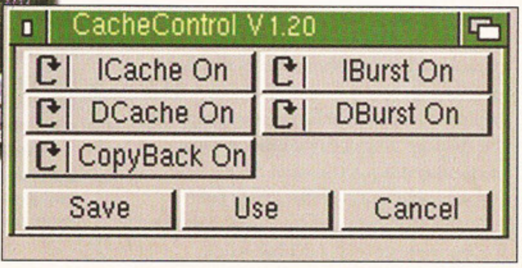

    /* that's it! */

}
```

Understand the basics and the rest becomes as easy as, well, ABC...







Mmmm... fast things. Pretty. But are you getting the best out of them?

AF NEW Tutorial CHAPTER ONE

Amiga Graphics

Another brand new series starts this month, with Nick Veitch explaining all about pixels.

Contents

Make sure you don't miss a tutorial – call our subscriptions hotline, 01458 271102 (see page 50).

When the Amiga was launched, one thing that set it apart from common computers like IBM PC clones and UNIX workstations was the operating system.

The Amiga used a WIMP environment, relying on graphics to allow the user to operate the computer, and the platform has been heavily used for graphics work ever since.

When the operation of the computer depends on graphics, it is probably a good idea to know something about them. What, at the end of the day, are graphics, how can you create them and how can you use them to your advantage?

> "Like paint packages, the Amiga defines the values in the colour table in terms of values for red green and blue."

This series will take you through a series of chapters explaining various aspects of the graphical universe you inhabit every time you switch your Amiga on. By the end of part six, you should certainly know more about different types of graphics and file formats and, more usefully, how to go about displaying, printing and designing them for yourself.

WHAT ARE GRAPHICS?

A graphic, or a graphics file, is rather like any other computer data. It is, in its simplest form, just a collection of digital 1s and 0s. Take your Workbench screen for example. The information which the Amiga uses to build the display exists as a block of memory, located in the Chip RAM of your machine. The memory contains the information relating to each and every pixel displayed on the screen.

The Amiga, in common with virtually all computers, stores display graphics in terms of a colour map. This means that the actual memory used for the display stores the number for a particular colour for each pixel. The colour table then defines how each colour is constructed in terms of values for the red, green and blue value.

This may sound a little complicated, but it is the basis of all graphics on your Amiga, and when you think about it, exactly how paint packages work too. Changing the palette in *PPaint* is exactly the same as changing the colour table.

Like paint packages, the Amiga defines the values in the colour table in terms of values for red, green and blue content. RGB values are used because virtually every colour can be made up from these values. An RGB colour model is used as this is the way transmitted light works.

There are important differences between transmitted light and reflected light, but these will be dealt with in a later chapter. A monitor's display is a light transmission device, so the RGB model is the most appropriate.

The amount of memory space the graphic takes up depends not only on how big it is, in terms of x and y dimensions, but also how deep it is.

This is simply because if you have a 256-colour image, the memory space for each pixel will need to be big enough for a number from 0 to 255 (or eight bits). If it is only two colours, it requires space for a 0 or 1 (or 1 bit).

DISPLAY HARDWARE

In simple terms, the display chip of the Amiga reads in the colour number for a pixel, looks up the table of colours, adjusts to the correct RGB values and then displays the pixel.

Of course, the display chip has to generate these RGB values in a prescribed range and send timing info

Bitplanes

The Amiga organises the memory used for storing screens into bitplanes, instead of chunky pixels. Quite simply, this means that the memory is used like this:

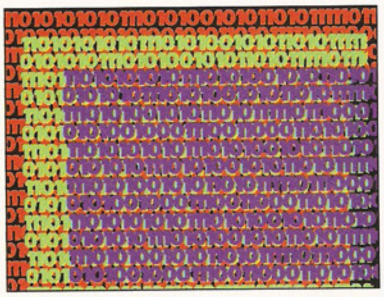
Pixel1bit1, pixel2bit1, pixel3bit1, pixel4bit1...
Pixel1bit2, pixel2bit2, pixel3bit2, pixel4bit2...
Pixel1bit3, pixel2bit3, pixel3bit3, pixel4bit3...
Pixel1bit4, pixel2bit4, pixel3bit4, pixel4bit4...

Most computers use a "chunky" pixel storage method, like this:

Pixel1bit1, pixel1bit2, pixel1bit3, pixel1bit4...
Pixel2bit1, pixel2bit2, pixel2bit3, pixel2bit4...
Pixel3bit1, pixel3bit2, pixel3bit3, pixel3bit4...
Pixel4bit1, pixel4bit2, pixel4bit3, pixel4bit4...

Memory stored the latter way is much more convenient for fast colour decoding and for moving software sprites around the screen, because it is easier to find all the bits relating to one pixel.

However, storing graphics memory in bitplanes makes it much easier to scroll screens, or even parts of screens, and is responsible for many of the Amiga's unique features, such as the ability to drag screens.

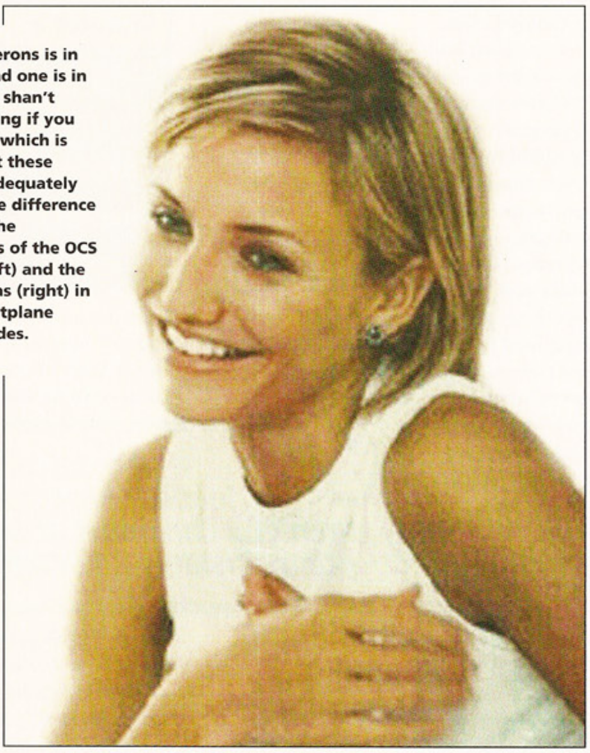


Bitplane orientation means colour values for a single pixel can be separated by vast acres of memory – but it makes scrolling fast!

DOING YOUR SUMS

Using your knowledge of how the graphics data is stored, it is now possible to work out how much Chip RAM your various screens are going to eat up. For example, how much memory is a 640x512 workbench screen in 16 colours going to take up?

Well, sixteen colours, if you know your powers of two, requires four bits to represent the different colour numbers 0 to 15. The total number of pixels on screen is 640 times 512, which is 327,680, so the total number of bits required is 4 times 327,680, or 1,310,720. As there are eight bits in a byte of computer memory, this is equal to 163,840 bytes of memory, or exactly 160K.
This formula works for any normal screenmode (in K):
(bit depth x width x height)/8192.

One of these Camerons is in 256 colours and one is in 32 colours. I shan't bother asking if you can guess which is which, but these pictures adequately portray the difference between the capabilities of the OCS Amigas (left) and the AGA Amigas (right) in standard bitplane display modes.

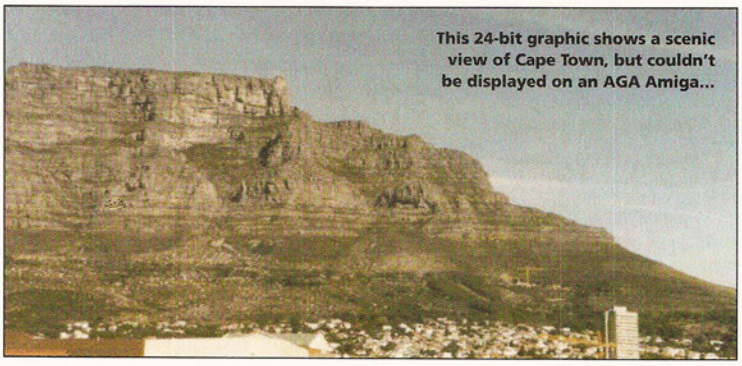
to drive your monitor too, but that's just a bit of electronics and has little to do with the data.

Images are built up line by line, which can be important as that's how the copper comes into play, more of which later.

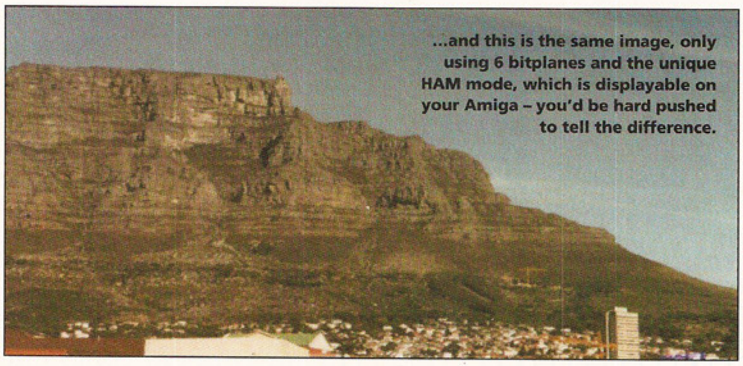
Without resorting to trickery, an AGA Amiga can display an eight bit screen, which means 256 colours (2^8).

However, the colours themselves are represented by eight bit values for each of red green and blue, which gives a choice of 256*256*256 colours or roughly 16.8 million.

This is the same whatever screen depth you are working in, so you may only have a four-bit screen for example, but you still have a 24-bit palette. A 24-bit palette is just about the best you can get and there isn't really too much point in exceeding those limitations. This is because the human eye finds it rather difficult to distinguish between many more colours than that.



This 24-bit graphic shows a scenic view of Cape Town, but couldn't be displayed on an AGA Amiga...



...and this is the same image, only using 6 bitplanes and the unique HAM mode, which is displayable on your Amiga – you'd be hard pushed to tell the difference.

CUNNING TRICKS

When the Amiga was being invented, Jay Miner experimented with a display mode which came to be known as HAM (Hold and Modify). It was a little slow, it had a few problems and it almost didn't actually make it in to the final make-up of the Amiga, but somehow it survived and was retained.

The result was that, on a machine theoretically capable of only 6-bit graphics, you could display thousands of colours at once.

HAM mode uses the copper, part of the Amiga's custom chip set, which can execute instructions during the time it takes to scan from the end of one line to the beginning of the next.

In HAM mode, the copper is actually used to dynamically change the palette, allowing you to use a completely new palette on each line.

Because of the time required to do this, original HAM-6 images could only be displayed in the narrower lo-res modes (though these could still be interlaced). AGA machines can employ the same trick on eight-bit depth screens, and at higher resolutions, which gives some pretty realistic results.

Unfortunately, because of the time taken to decode and "build" these displays, animating them is always going to be restricted to either low framerates or low sizes. But it's still a cunning trick!

NEXT TIME

Now you (hopefully) know a bit more about how the Amiga itself handles and displays graphics, we will be taking a look at how graphics files themselves are stored, and the many different formats, compression techniques and converters which exist. I hope you'll join us then!

GLOSSARY

AGA – Advanced Graphics Architecture. This is the term used to describe the upgraded custom chip set found in the A1200 and A4000.
CLUT – Short for Colour Look Up Table.
WIMP – Windows, Icons, Menus and Pointers, used to describe operating systems which rely on these to work.
HAM – Hold And Modify. A cunning trick, allowing the Amiga to display thousands of colours on screen at any one time.
RGB – Red, Green, Blue. A term used to describe variously the colour model used by the computer, or even its output. Red, green and blue are commonly used to describe colour values in graphics work, because a combination of RGB values can define almost any visible colour.

C for Yourself

In the second tutorial in this series, John Kennedy looks at the basic anatomy of a C program.

Contents

Missed a tutorial in this series? Call our back issue hotline on 01458 271102 or see page 51.

C is a very flexible language in some ways. For example, you don't need to worry about line numbers and you can space programs out as much or as little as you want. At first glance the same C program written by two different people might look completely different, even though it contains exactly the same code.

In other ways C is very rigid as every program starts in a particular place and you must declare variables and functions before you use them. All instructions must be separated by a semicolon and blocks of code must be contained in matching curly-brackets.

It's often all this punctuation which can put off novice programmers, but stick at it – it only takes a little practice to understand what is going on.

INSIDE A C PROGRAM

A C program can be described as a list of one or more functions. A function is a self-contained block of code with a name, a list of optional parameters and, if necessary, some variables.

Every C program has at least one function and this function is called main(). No matter how complicated the program, somewhere you will find this function and this is where everything starts. When the C program is compiled into a form where it can be executed, it starts running from main().

In a small program, everything that needs to be done can be achieved from inside this single function. However, larger programs will call other functions. For example, your program might load an image from disk for processing. If you define the entire loading process as a function then you can use it at several points inside your program – the code only needs to be included once as a function. It can then be called as many times as is needed.

Although a C program may consist of a single text file containing the main function (and any others) it's common practice to incorporate other files. The reason for this is flexibility. A C program by itself is pretty dumb. It can do some sums and perform actions depending on results but it can't do something as basic as printing to the screen. This is because actions like these vary so much from platform to platform. The method for printing to the screen on an Amiga is totally different on a PC or a Unix system, so the machine specific parts are removed and stored in a library.

Your C program can dip into the library to use these functions whenever you like. In order for the C compiler to know where these functions are stored, and what they are called, the first few lines of the program often contains links to files called "headers". These contain a list of the available functions. Let's look at some real C programs to see all this in action.

```
#include "stdio.h"

main()
{

	/* define some variables */

	int a;
	int b;
	int c;

	a=1;
	b=2;


	/* do a sum */

	c=a+b;

	/* display the result */


	printf("The sum of %d plus %d is %d\n",a,b,c);


	/* that's it! */

}
```

LISTING 2

```
main()
/* the main function, where everything starts */
{

	/* define some variables */

	int a;
	int b;
	int c;


	/* assign values to them */

	a=1;
	b=2;


	/* do a sum */

	c=a+b;


	/* that's it! */

}
```

LISTING 1

SAMPLE C

Listing one is a very simple program. It contains only one function, main(), and doesn't do much. It defines some variables and performs some arithmetic but it doesn't display anything on the screen. If you were to enter this program into your own C system and compile it, when you ran it you would see nothing. Notice that we can insert our own comments inside the program by enclosing them between "/*" and

> If you define the entire loading process as a function then you can use it at several points inside your program…

Variable types

A variable is a way of temporarily storing information. For example, you might want to store the position on screen of a character in a game, you might want to store a date or store some numbers needed for a calculation.

Before you can use a variable in a C program you must declare it. This involves telling the C compiler what you intend to use it for – in other words, you must define its type. This allows the compiler to work out how much space it needs to reserve for it.

Typing variables also makes things a bit easier for you because if you try to perform an operation on a variable which is impossible for that type, then you will be warned.

The most common variable types available to the C programmer are shown below. The number under "bits" tells you how much memory the C compiler uses to store that particular variable.

TYPE	BITS	VALUES
char	8	0 to 255
int	16	-32768 to 32767
float	32	Approximately 6 digits of precisio
double	64	Approximately 12 digits of precision

```
#include "stdio.h"

/* declare my function */

void myfunction()
{
    printf("-------- C is great --------\n");
}


main()
{

    /* define and assign some variables */

    int a,b,c;

    a=1;
    b=2;

    /* do a sum */

    c=a+b;

    /* display the result */

    myfunction();

    printf("The sum of %d plus %d is %d\n",a,b,c);

    myfunction();

    /* that's it! */
}
```

LISTING 3

"*/" in that order. These comments are completely ignored by the compiler and are therefore very useful to us for storing details on what certain pieces of code are doing. They can also be used to temporarily remove code from a program, which is quite useful when testing and debugging.

Listing two is also a simple program but this time it displays something on-screen. The #include line is a special compiler directive, which means that it doesn't become code as such, but is an instruction for the compiler.

In this case, the instruction is to use the external library which contains the code for printing to the screen. Now we can call the function printf() which does just that. Printf() is defined somewhere else, we don't care where, and we can treat it as a black box into which we can feed values and obtain a result – in this case, something displayed on-screen.

The funny codes which appear inside the printf() function are called formatting codes and these are one of the many things which you'll have to learn in order to be a C programmer. Basically, printf will display everything it finds inside the quotation marks, but the formatting codes will cause it to display things in a certain way.

Listing three uses a function. This function doesn't do anything particularly exciting, it merely displays something on the screen. We have to include the word "void" in front of the function name to tell the compiler that the function doesn't return any value – we'll come back to this later.

> "Notice that although the function appears first in the listing, the action it performs doesn't occur until much later."

However, for now look closely at the program and, if possible, compile and run it on your system. Notice that although the function appears first in the listing, the action it performs doesn't occur until much later.

In fact, it doesn't happen until the function is called from within the main() block. If the main() function didn't call the new function then it would never be called.

CONDITIONAL C

Now we can start to look at some of the useful constructions which allow a C program to actually do something useful. One of the easiest things to do is perform actions conditionally, which means only performing them when certain conditions are true. This can be achieved by using the "if" keyword.

Listing four is an example of a program which looks at some numbers and uses the "if" keyword to call a function if a condition is true. You should enter this program into your own C compiler in order to try it out.

The code which follows the "if" inside round brackets is the condition – it's the test to see what happens next. If the condition is true then the code after the "if" is executed.

If the condition is not true then the code is skipped. There are several points to note here:

1. There are several ways to test conditions. The example in the listing is "Equals to", which uses the double equals sign. You must use a double sign when testing and this is the number one mistake made by novice C programmers.
2. You can also use "greater than" (>) and "less than" (<) tests, as well as "equal to or greater than" (=>) and "equal to or less than" (=<). If you want to say "not equal to" you can use "!=".
3. Only a single block of code after the "if" is executed. What happens if you want to execute several lines? Do you always need to call a function? No, you can enclose the code inside more curly brackets. Listing five demonstrates this.

That's it for this month. Please take the time to compile and run the example programs. You should also try adding your own functions, changing the numbers and including mode printf() statements in order to monitor which parts of the programs are actually being executed. AF

PRINTF AND FORMATTING CODES

Printf is a vital function as it displays information on the screen. It is also extremely powerful and can display text, numbers, variables and other special codes. The last example assumes that "answer" is a previously defined integer variable containing the value of ten.

EXAMPLE	OUTCOME
printf("Hello! Hello!");	Hello! Hello!
printf("Hello!\nHello!");	Hello! Hello!
printf("The answer is 10\n");	The answer is 10 (new line)
printf("The answer is %d\n",10);	The answer is 10 (new line)
printf("The answer is %d\n",answer);	The answer is 10 (new line)

```
#include "stdio.h"

/* declare my function */

void IsSeven()
{
    printf("That sum was seven!\n");
}


main()
{

    /* define and assign some variables */

    int a,b,c;

    a=3;
    b=4;

    c=a+b;

    /* do some tests and call the function if necessary */

    if (a==7) IsSeven();

    if (b==7) IsSeven();

    if (c==7) IsSeven();

}
```

LISTING 4

```
#include "stdio.h"

/* declare my function */

void IsSeven()
{
    printf("That sum was seven!\n");
}


main()
{

    /* define and assign some variables */

    int a,b,c;

    a=3;
    b=4;

    c=a+b;

    /* do some tests and call the function if necessary */

    if (c==7)
    {
        /* several instructions are executed
           if the condition is true */

        printf("Currently testing the value of C!\n");
        IsSeven();
        printf("Finished testing C.\n");
    }
}
```

LISTING 5

Under the Bonnet



Simon Goodwin continues the tutorial for advanced Amiga users.



AFCD26:-In_the_mag-/Under_the_bonnet/

Contents

Missed a tutorial in this series? Call our back issue hotline on 01458 271102 or see page 51.

A top-spec Amiga can run 68K software 50 to 100 times faster than the original model, although memory speeds lag far behind processor advances. A typical A500 had 16-bit wide, 150 nS memories; modern machines use 32 bit 70 nS SIMMs, little more than four times faster.

The difference is spanned by caches, the fast memories inside the processor. These don't add to the total memory of the system but they hold duplicate copies of information already available outside. These hidden stores work faster, allowing the processor to race ahead of external memory.

Most programs benefit because they repeatedly reuse the same code and data. Initial access is as slow as ever, but when information is needed again the cache may supply it, saving time and leaving main memory free for access by other chips.

> ...when information is needed again the cache may supply it, saving time and leaving main memory free for access...

The bigger the cache, the greater the chance that recently used information will still be available. 68020s cache 256 bytes of recently executed instructions.

Data accesses go direct to main memory, but they can read cached instructions at the same time.

Unfortunately, some old 68000 programs modify their code as they go along. They fail on later processors, unless caches are explicitly flushed; re-written instructions in main memory are contradicted by unchanged code in the cache. Consequently many old games and emulators crash unless caches are disabled. The CPU NOCACHE command does the trick.

68020 and later Amigas start with the instruction cache switched on, unless disabled by the Early Startup Menu. 68030s add a second 256-byte cache for recently-read data.

They can juggle three things at once, fetching cached instructions and data as a third value is manipulated in main memory.

The startup sequence SetPatch command enables the data cache, for 32-bit expansion memory. The data cache is not used for custom chip addresses because the processor might ignore any data modifications made by the blitter or other logic, completely bypassing the data cache.

BURSTING

Dynamic memory can return quick 'bursts' of consecutive values, benefiting 68030 and later systems. Once an initial word has been found, values immediately after it can be selected in about half the time.

Later processors can read and write 'lines' of 16 consecutive bytes so nearby words are already in the cache when needed, generally boosting speed.

Burst mode upsets some combinations of accelerator and memory, crashing programs. If you can't afford a hardware upgrade, the command CPU NOBURST forces a slow fetch for each word, at some cost in performance.

COPYBACK

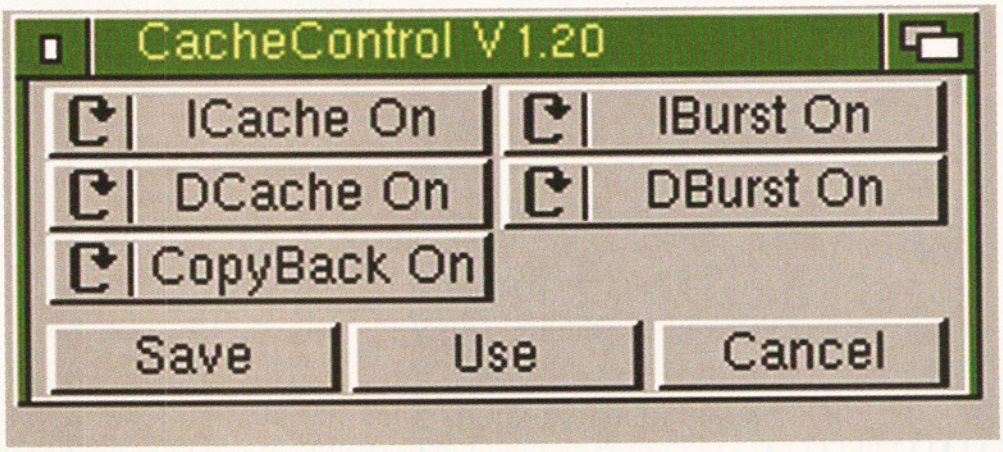
68040s have two 4K caches. 68060s have 8K each for code and data. They can cache writes as well as reads. This makes some programs much faster but self-modifying code even more risky, as writes are delayed, only escaping to main memory when the cache is flushed or overflowed. This forces updates to make room for fresh reads.

Copyback writes are rarely in program order. The 68060 adds 'store buffers' which hold values en route to memory, giving some of the benefit of Copyback but greater compatibility.

CACHE CONTROLS

The CPU command is the main Amiga system cache controller, jumbling together a job-lot of processor-related commands. Commodore's CPU command is a mess. It has 22 options, some ignored, depending on SetPatch and your processor set-up.

The reliable options are CACHE and NOCACHE, to turn all caches on and off, and the DATA and INST



Cache Control lets you toggle caches from Workbench.

CACHE TIMINGS

The table shows the results of cache switching on Amigas from 68030 to 68060. I used the Twister test from my UAE review, which rotates small bit-mapped patterns. Processor comparisons depend entirely on the operation being performed. This test performs far more data reads than writes, so the advantage of Copyback is relatively slight.

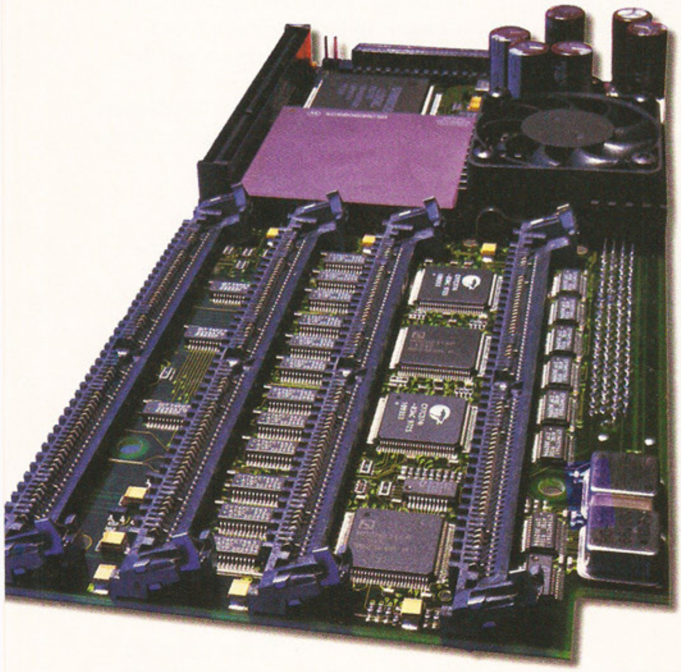
Data cache settings affect other programs differently. Pure number-crunching, like SysInfo's discredited MIPS test, is hardly influenced by the data cache. Programs that shuffle strings or stacked variables gain more from Copyback. It's a simplistic test and larger programs will vary, but you can draw remarkable conclusions from the results.

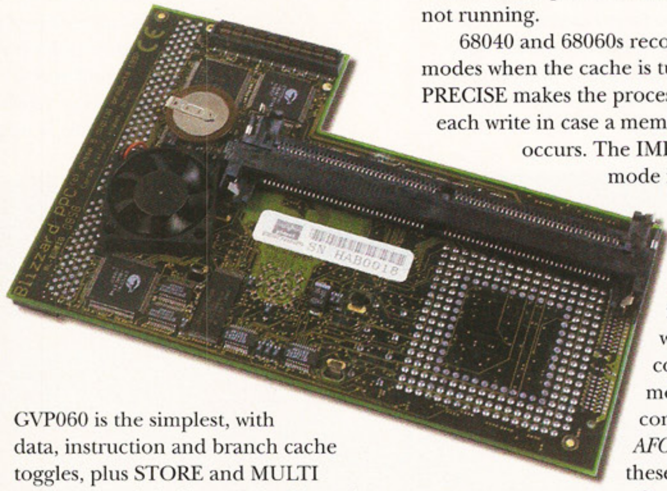
- **A 25MHz 68030 (A3000 or A4000/'030) with caches on is marginally FASTER than a 50MHz Cyberstorm with all caches disabled!**
- **Commodore's A4000/'040 is marginally SLOWER than the 4000/'030 at the same 25MHz, if both have caches disabled. In fact, the crippled 68040 is barely half the speed of a caching 68030!**
- **Caches make little difference on a 68030 system with fast memory, shaving perhaps a third off the time for most tests, but 68040s and 68060s benefit six or seven times over!**

Effects of cache control on fast Amigas

CACHES	68030/25	68040/25	68060/50
All caches off	5.6 x	4.2 x	7.9 x
Data read only	6.6 x	6.7 x	12.1 x
Data Copyback only	N/A	7.0 x	12.8 x
Instructions only	7.0 x	7.3 x	12.1 x
Cache reads only	8.3 x	21.9 x	45.0 x
All caches on	8.3 x	25.7 x	61.3 x

TEST SYSTEMS: C= A4000/030, C= A4000/040, Cyberstorm Mark 1 68060.
RELATIVE SPEEDS: 4 Mb A500 = 1.0 x





The lesson to learn this month is to make sure you have your caches enabled.

variants which affect only data or instructions respectively.

The CPU COPYBACK command is ignored after a modern SetPatch. The Burst options expect a 68030. FastROM and ExternalCache require add-on hardware, and the 'developer specific' TRAP option baffles even certified developers. The 68060 Branch Cache and Store Buffers are unsupported.

68060 EXTRAS

Recognising the limitations of Commodore's CPU command, 68060 accelerator firms provide alternatives. GVP060 is the simplest, with data, instruction and branch cache toggles, plus STORE and MULTI options to switch the store buffer and superscalar instruction execution.

GVP060 can only change one thing at a time. If you specify several options at once, only the first is obeyed. GVP060 works on a Cyberstorm, unlike the opposite combination, which uses undocumented hooks in phase 5's 68060.library.

The Branch Cache upsets old SAS C 'optimisations' that break Motorola rules about mixing code and data. Early 68060s have an obscure bug which may disrupt superscalar execution and floating point maths. I've never been able to recreate the fault, but phase 5's NOSUPERSCALAR and GVP's NOMULTI options should cure it.

phase 5's grudging CPU060 has almost as many options as CPU, and is similarly obscure. Store Buffers are renamed 'Write Buffers', and a bare CPU060 prompts Ralph Schmidt's whinging: "Do you know what you're doing? CPU060 doesn't make your system faster… only slower… DON'T use this tool!".

COPYBACK

There's no official way to switch Copyback on or off with memory management in use, so I've written commands which change the Copyback status of fast RAM on all the relevant systems I've tested - Warp Engine, C=3640, GVP4060 and Cyberstorms.

MMU_COPYBACK sets the default. MMU_WRITE_THROUGH caches reads but not writes, giving better compatibility with 68030 programs. As the penultimate line of the table shows, this typically reduces speed, but programs that write a lot without re-reading may actually benefit.

These commands directly manipulate MMU tables directly. They need at least a 68040 with 4K MMU pages already set up, otherwise indicating failure with error code 20.

They do not remap chip memory. A current SetPatch and 680X0 library is essential. Early WB3 systems ignore the MMU until something like GigaMem or Enforcer needs it. The old CPU COPYBACK option works if the MMU is not running.

68040 and 68060s recognise two modes when the cache is turned off. PRECISE makes the processor wait after each write in case a memory error occurs. The IMPRECISE mode is faster as it lets the processor get on with subsequent instructions while a write is completed. Two more MMU_ commands, on *AFCD26*, select these modes.

SpeedyChip (on Aminet) sets IMPRECISE mode for Chip RAM, boosting AGA updates on systems with old 680XX.libraries.

It really makes no difference on current libraries which default to imprecise mode. Custom MMU code allows data caching of selected chip RAM and Zorro 2 areas, but that's more advanced hacking.

OTHER CACHES

Processor caches should not be confused with drive caches, maintained by software, which minimise seeks and re-reading from mechanical drives by storing recently-accessed data in RAM. Examples include CacheCDFS, CacheClock and DynamiCache, on the CD. Beware of disk write caches, which delay updates and may lead to data loss.



Mail*Bag*



Send your letters to: **Letters To The Editor • Amiga Format • 30 Monmouth Street • Bath • Somerset BA1 2BW** or email to:amformat@futurenet.co.uk – putting 'Mailbag' in the subject line.

SEND US	SPARE US
Ideas for the mag	Complaints about lack of game reviews
Your own Amiga adverts	Comments about how long it takes *AF* to reach Timbuktoo
A completed subscription form	Nonsense
Things which make some sense	Technical problems (address them to Workbench)
Comments and queries	Complaints about the Internet
Letters via the Internet	Dull uses of the Amiga
Interesting uses of the Amiga	Amigas you have seen in Tandy
Amigas you have seen in Vegas	

HOLA!

First of all, let me congratulate you on your magazine. Here in Mexico we receive 2 Amiga magazines with one to two months of delay and, in my humble opinion, yours is the best.

I am writing this letter without any hope of making a headline in your mag but I have some ideas that I'd like to share with you.

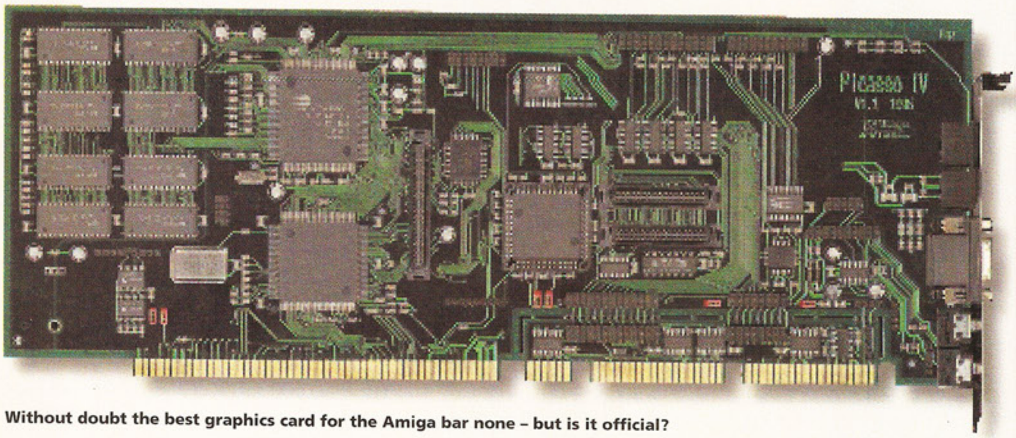
I've been reading your December issue with all the good news about the gfx cards and the PowerUp accelerators, although the prices are way too high for my wallet. I am looking forward to buying a Picasso IV gfx card but before I make any decision I want to know what Gateway 2000 think about CyberGraphX and Picasso, and what they think about phase 5 and Apollo.

Why hasn't Petro said anything about an "official" gfx or accelerator card? Do they have a secret weapon to show? My point is, why hasn't Amiga Inc. given an official tag to any of these products?

It'll be easier for everybody if they test the stuff and say: "This is what the Amiga needs," maybe make some modifications or upgrades and then, "The Official Gateway 2000 approved Amiga gfx/Accelerator board."

This will make prices go down, new games and software emerge and more hardware. Well at least that is what I think. Keep up the good work and the excellent reviews.

Noe Gonzalez
Mexico City, Mexico



Without doubt the best graphics card for the Amiga bar none – but is it official?

It would be a bit divisive to choose one manufacturer as supplier of an official product. If Amiga Inc. decided to make the Picasso the "official" graphics card, where would that leave phase 5 and the CyberGraphX card? It would actually be a disincentive to other third party manufacturers. But you are right that clearer indication from them about the way forward would help a lot.

CHEAP PLUG

I am writing to ask why I never see any support for the BBSs out here that support the Amiga. We work as hard as



most companies to keep the Amiga alive and we don't get paid for it.

I myself am a sysop of a BBS called Entertainment UK , which a friend and myself have run for over 2 years. I agree there are a few pirate boards out there but a lot of us run professional systems that are free to users.

So how about some plugs for us little people who are keeping the 'Miggy' alive? Our BBS can be contacted on 01942 221375 (3 lines) and we do not charge for access, nor do we carry any illegal software.

Warren Bolton
Entertainment UK BBS
01942 221375

I don't know why you never see anything about BBSs in AF. *Perhaps if sysops wrote in to the magazine when they had special events on, or perhaps if they placed an ad in our Reader Ads section then they would get mentioned a bit more...*

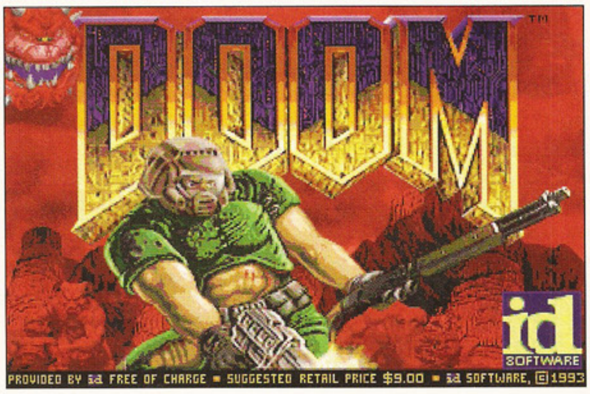
DOOMED

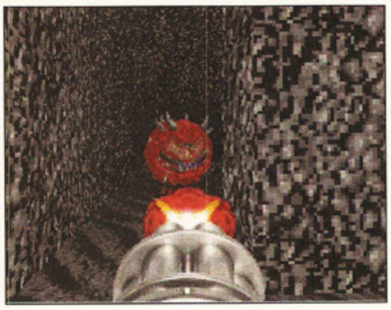
I was wondering if you could help me, I'm looking for a reasonably priced, easy to fit accelerator and graphics card for my A1200. This is because with my current set up I can only play *Doom* on a screen the size of a postage stamp with the low detail on, and it's still jerky!

I really like the Shareware version on your cover CD and I want to show my friends just what the Amiga can do.

Paul Fletcher
Middlesbrough

It's *Doom*, but on the Amiga. Yesterday. Or actually, a few weeks ago now.





JOIN THE Q

Last year I bought a Q-Drive for the A1200 with a PCMCIA connector which I purchased from Silica. I have no hard drive and had to resort to using the floppy boot disk. However, when using one of my CDs I stupidly left the floppy boot disk unprotected and extracted a game onto it, erasing all contents, including my CD32 emulation.

My problem is that all my CD32 games are lying around without a purpose. I rang Silica on a number of occasions begging them to send me another copy of the floppy boot disk and they said they would, but it never arrived. Could you tell me where I could get another copy, or something similar to suit my needs, preferably with a CD32 emulator and software to let me use music CDs.

Tony

How many times have we told people to keep backups of important disks? How many? It's not as if floppy disks are expensive or anything either. If anyone can help this poor unfortunate, please send him a copy of your Q-Drive boot disk. And if you have only one copy of something important, make a backup now!

This sounds suspiciously like a question for Workbench to me, so perhaps you should have written to them. A bog standard A1200 is never going to be able to keep up with Doom *so you really do need an accelerator.*

They are all easy to fit as they just slot into the trapdoor. Which one? Well it depends on you. So many have been reviewed in AF *that there must be one suitable for every need and financial situation. An '030 will make a difference, an '040 will make a bigger difference and an '060 will be better still. It all really depends on how much you want to spend.*

A graphics card isn't so simple as you can't just add a graphics card to the A1200, you would need Zorro slots, which means getting a tower system and a Zorro daughterboard. There will be a graphics card available for the Blizzard PPC accelerator, but you are still going to need a tower to house it.

SMELL THE COFFEE

I would be very interested in a feature on the impact that Java is likely to have on the Amiga. I understand that not much has happened yet, but with the Haage & Partner Merapi project it will happen eventually.

It seems to me that it has the potential to be very significant for the Amiga, especially in its current weak state. In the not too distant future we could have our Java Virtual Machines up and running on our fast PowerPC enhanced Amigas, with the very real option of buying very polished applications previously only aimed at Mac and PC users.

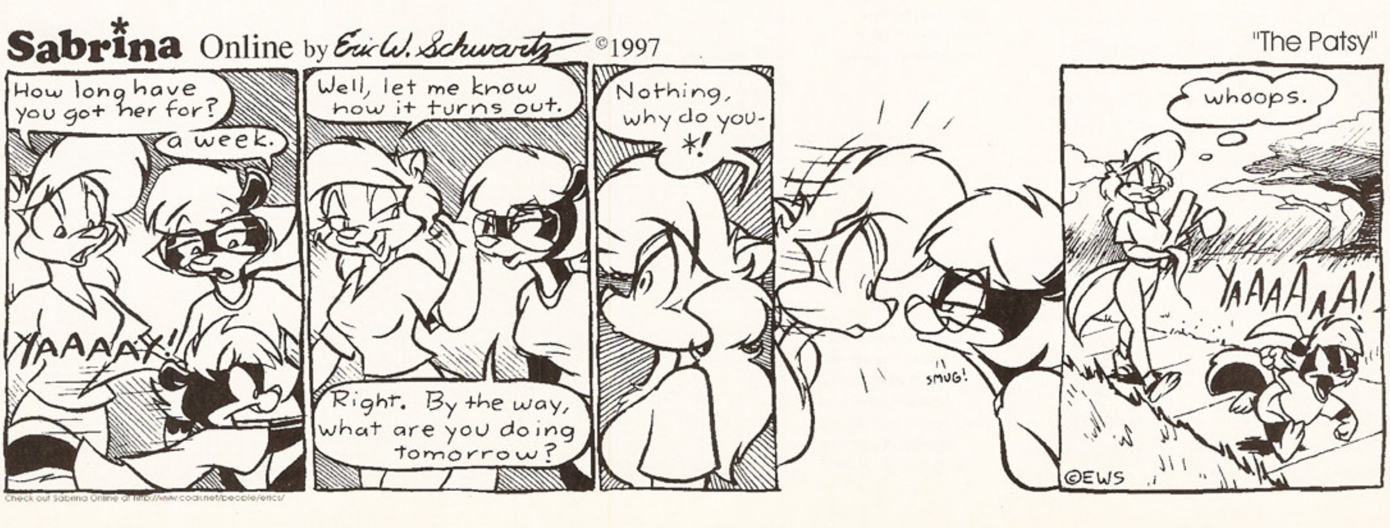
This could be great news for Amigans as more and more software becomes available, but alternatively will this mean even less sales for quality Amiga applications such as *Wordworth* or *PPaint*? I don't know whether the Amiga-specific nature will be enough to keep people buying Amiga software at sufficient levels to maintain development in the future.

I would like to see what those companies that produce Amiga-specific applications think. Are they worried by the prospect of the Java software that looks set to appear?

Is Java going to give new life to Amigas or will it be the final straw for those companies that have continued to support the Amiga? I don't know, but I would like to know what you and the Amiga community think.

Mark Hughes
Glossop

Continued overleaf ➡



Check out Sabrina Online at http://www.coai.net/people/erics/

Platform independent programming languages are all very well, and indeed some applications allegedly run faster in Java than compiled on their native hardware.

However, there is still a long way to go before it could be considered the lingua franca *of applications programming. We will be covering Java in more depth in a future issue of* Amiga Format.

MONKEY BUSINESS

Picture this scene if you will. I'm peacefully and happily reading *AF108* and have just finished reading the gaming special when I turn to the modem roundup. Suddenly the tranquillity of my day is gone.

Speechless I stare at the page as my jaw hits the deck. What a mistake! How could it have happened? The Origo 33.6K modem had a picture of the Origo 56K modem with its review and vice versa!

I demand to know what torture will be given to the wretched mortal responsible for this hideous mistake. How about forcing him to listen to every speech ever made by Bill Gates?

One last thing. Does anybody remember Stuart N. Hardy?

Mark Weldon
Wigston

I'm afraid the art-monkey Colin has struck again. If anyone has any suggestions on how we can keep this scapegoat, er, I mean loose cannon, under control, please drop us a line. As to your last point, I thought nobody was allowed to mention that name again.

PASS THE PORT

Over recent months I have been getting quite excited about the prospect of the Amiga's future in the hands of Amiga Inc. until I saw the leaked press release from them on your news page in the March issue. After all that waiting I couldn't believe it. No new Amigas to be made by Amiga Inc., no PowerPC Workbench and no PowerPC DOS by them either.

About the only thing they have promised is a new version of Workbench, v3.5, which is only likely to be a tarted up version of WB3.1 anyway, with a selection of the Shareware utilities that we are all using anyway.

Why don't Amiga Inc. get their fingers out and give us some real support, in the form of new machines with a new architecture (how about 64-bit?), a new Workbench and AmigaDos that supports the PowerPC directly instead of leaving other companies to do it all for them?

Obviously the existing Amiga community needs to be supported in the short term and the things mentioned take time, but we need to move forward instead of backward. How is the Amiga supposed to move forward when Amiga Inc. are allowing machines to be sold as floppy only systems with no hard drives and no CD-ROM?

All this should come as standard. Licenses are being given to companies to produce Amigas with the aging AGA chipset. Nobody is saying that Amiga Inc. should not support the existing Amiga community in some way, but we need to be moving away from yesterday's technology and look towards what is on offer now in the form of industry standards.

The Apple managed to move away from 68K processors directly into PowerPC years ago, with emulation of its previous software, so there is no reason why the Amiga can't do this and take all its great software with it through either software or hardware emulation.

I have always been a great fan of the Amiga, but I think that now it is time for a big shake-up if we are to survive as a modern computing platform.

Damon Magee
Hull

I take your point. It would be good to see more of a lead coming from Amiga Inc., especially with regard to the hardware.

Regarding Apple's switch from 68k to PPC. This was by no means easy and much of the "older" software is actually slower on the PPC than on 68K machines because it has to be emulated. Even if Amiga Inc. invested the effort into porting, a lot of older software isn't going to work anyway because it hasn't been programmed in a system friendly way. Sadly it isn't as simple as all that, really.



Someone must have shuffled the pack during the photoshoot or something – Colin.

The following experience of an Amiga-owning friend out to purchase a new colour printer offers some hope. Having established a budget, the sales assistant (at John Lewis, Edinburgh) guides my friend towards an Epson Stylus 400, an excellent printer I am sure you'll agree. He also has the foresight to ask what computer my friend will be using. A laptop PC, an Amiga and a Mac. Well, says the assistant, you'll need the Stylus 600, which is above your stated budget, as it supports the Mac's serial port. It's not that simple, says my friend, and proceeds to tell him about *ShapeShifter* on the Amiga.

The assistant is utterly astounded and informs my friend that he has been trying out UAE (the non-commercial Amiga emulator) and enjoyed it so much that he has been buying Amiga magazines because of it.

OK, so a couple of mags won't change the course of history, but I am sure this is not an isolated case. It certainly mimics my and several friends' experiences with *ShapeShifter.* I have certainly found that most PC owners and even more Mac owners are completely gobsmacked when they do see a real Amiga in action as it always surpasses their preconceptions of the "Amiga games machine".

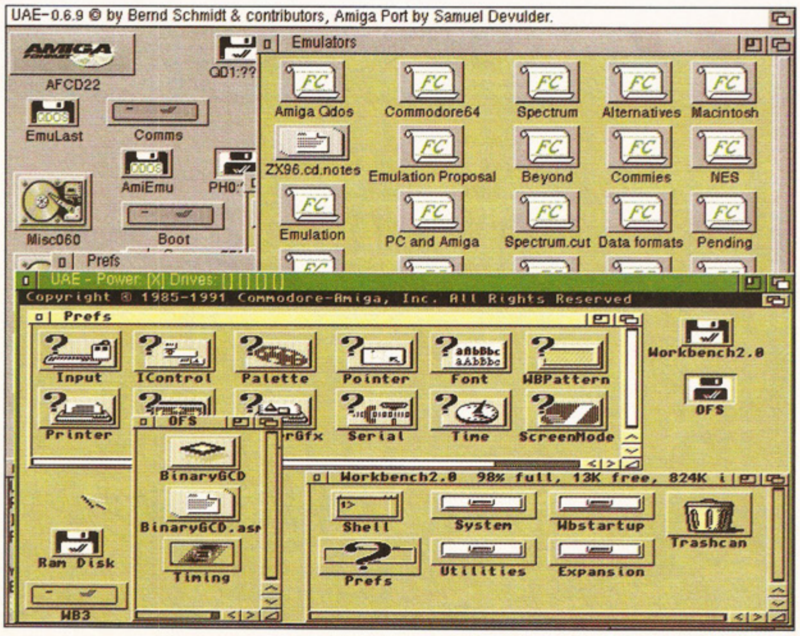
FOREVER AND EVER

It may be that Cloanto are correct in stating that their *Amiga Forever* software is actually an aid to the Amiga's continuing (viva Amiga!) existence.

Most Amiga owners would assert that a PC owner is someone who does not know what an Amiga is, let alone having ever tried one. On the other hand, there can be few Amiga owners who have not been exposed to a PC. I spend a lot of my time using an NT4 machine and a PowerMac so I know why I prefer the Amiga.

Thanks to emulation I can run *Photoshop, Director, X-res, Kai's Power Tools,* etc on my Amiga and the Mac community has benefited from my Mac software purchases and my Mac magazine purchases.

I hasten to add that my Amiga software library far outstrips my Mac one and includes *Lightwave, Photogenics, Multiframe* and *ADPro.*



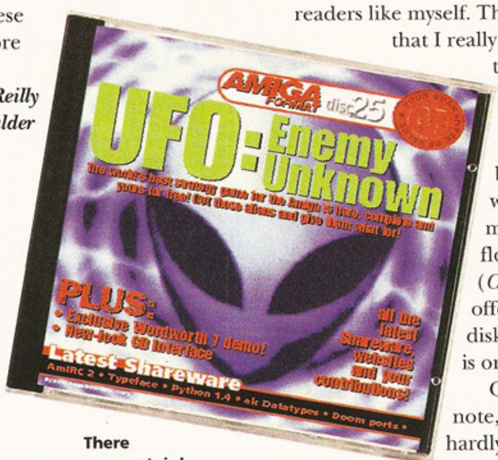
UAE is not only quite handy for testing backwards compatibility of software, but also a champion of the Amiga way of life!

If *Amiga Forever* lets more of these people see what it can do, then more power to its emulated elbow.

Mark Reilly
East Calder

This is not the first letter we have had along these lines. In fact, the more the popularity of UAE spreads the better.

Even if these people may not ever buy any Amiga hardware, the Shareware and software producers might still get some new custom and more people will understand just what the Amiga is capable of.



There was certainly plenty on last month's CD you won't be seeing anywhere else.

UNHOLY ALLIANCE

Have you and *CU Amiga* joined forces? I buy both every month and to my bewilderment both CD-ROM disks contain identical offerings, like *Doom* and *Kangy*. One of you must surely run the serious risk that readers will have to decide on one magazine if both of you are offering the same main articles in the same month.

OK, so to the best of my knowledge this is the first time I have noticed the duplications. Is it a sad reflection on how little is being offered each month?

Many of the utilities are also being duplicated. Can't you get together and collaborate over articles to save duplicating each other's efforts?

I am not into music, websites or programming. I don't have a modem. This means that a huge bulk of material on the CD-ROM is totally useless to readers like myself. This in turn means that I really do not require the CD-ROM versions and I could decide to skip an issue if both magazines were offering much the same on floppy disk. (*CU Amiga* was offering 3 floppy disks for *Doom*, and it is on the CD-ROM)

On a praiseworthy note, I really can hardly wait until the next issue comes out to get *UFO*. I upgraded from my C64 many years ago but only purchased my CD-ROM machine last August and have since felt disappointed with the lack of decent games that could so easily be included on the discs.

There are numerous good games long since deleted that I would love to see being re-released as a freebie – *Flimbo's Quest* as an example. Flairs Software version of *Trolls*, which was given away on the last issue of The One, is another. Also, The One giveaway doesn't seem to install using the Jst H/D installer for *Trolls* in the last issue.

David Wallace
Dunfermline

I'm sure both magazines attempt to get all the latest, best software on their CD. Well, I know we do anyway. The thing is that obviously all the big new Shareware which comes out each month is likely to be on both CDs.

However, what you will find unique to our CD is a large amount of Reader Contributions, which is usually stuff you will not find on Aminet or elsewhere.

Our new preferences system and more efficient system file usage mean less of our CDs are taken up with clutter, leaving more space for stuff you actually want.

Our CDs also have more exclusives of upcoming games (like our Genetic Species *demo, our* Foundation *demo and our demo of* Quake*), which are better tied in to the magazine – items mentioned are usually available on the CD in the same issue.*

Lastly, we have a very popular Reader Requests section on the CD which is there for things that you ask for. We firmly believe that our CD is the best one that is available in the Amiga market today.

GAMES MAD

The *Quake* news is great. I think the next games ClickBOOM should bring out should be some of the most popular PC titles like *Tomb Raider 1* and *2* and also *Command & Conquer: Red Alert* because, as well as making great sales from them, it'll show all those PC and PlayStation owners that the Amiga is perfectly capable of running these games.

Maybe you could make your magazine thicker so you can fit in all the reviews? How about bringing out a new Amiga magazine like *Amiga Power* which reviewed games only?

Why don't games companies like ClickBOOM and Black Blade send copies of their games to some magazine like *GamesMaster* because loads of console owners read those multi-format magazines and if they see that the Amiga means business then they may buy one.

Stuart Walker
Dorset

I'm sure ClickBOOM will be considering the possibility of more high profile conversions depending on the success of Quake*. If you like* C&C*, you should get hold of* Dune II*, which is the game that* C&C *was based on…*

Er, I don't know what you would fill an Amiga games-only mag with. If you consider that we already cover all the game releases as well as other stuff, you don't have to try too hard to work out that such a mag wouldn't be very big, and certainly wouldn't attract any valuable advertising.



Anyone know who this is? I've got no idea myself.

TROUBLE DUTCH

I'm sick of people only talking about the Amiga as just a games machine. At the moment I use my PC for that because games on the Amiga are not of interest or up to my standards.

I'm glad to see that is changing with the arrival of *Quake* and *Super Skidmarks+* and the like. Having said that, here is why I am writing.

At the moment there are only two things being talked about with regard to the Amiga's future – the processing speed and the games that need it.

However, one thing is being overlooked. The Amiga in the future will cost as much as a PC or a Mac. The Amiga will get the same games as the PC and Mac. So why is there no market for Amigas in Holland (and probably several other countries)?

Simple. The other main reason for using a computer in Holland is for word processing and DTP work. The Amiga has programs for these but the problem is that the most used and useful function in a word processor and DTP package is the spell checker. The Amiga has no Dutch spell checker and word processors and DTP packages aren't even in the Dutch language.

I know that a Dutch version can only be done if it doesn't cost too much and if there's a profit to be made. This is the main reason why Amigas will not sell in the near future in Holland. The spell checking should also be far better, like *Word* and *Word Perfect* on the PC.

Another point is that *WordWorth* and *Final Writer* should be able to use *Word* and *Word Perfect* documents. The PC will not leave the workplace and people do tend to bring their work home. That is made difficult if an Amiga word processor cannot read and write *Word* or *Word Perfect* documents.

Word processors and DTP packages

Continued overleaf ➡

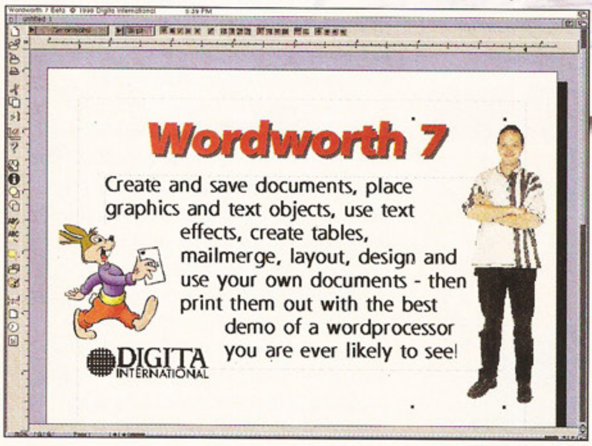
have only one spell checking language, so why not a first for the Amiga – a computer program that uses multiple spell checking languages?

It would be nice if my copy of *WordWorth* or *Pagestream* could spell check in English, Dutch and German.

Maybe Amiga International could fund this or make spell check libraries themselves so that the creators of *WordWorth* and *Pagestream* can then use them.

I think that the Amiga would have much more chance of succeeding if this was available and I would certainly buy upgrades to *WordWorth* and *Pagestream* if this became available. I'm already going to be buying *WordWorth 6 Office* and *Pagestream* in the near future, rather than getting similar PC software.

Remco Komduur
Holland



That's all very well, but what about our brothers across the channel who write in different languages?

As you say, I'm sure that if it were financially viable, companies would produce software properly localised for Holland.

Wordworth *does include spell checkers for English, French and German already. I expect that Digita would happily include a Dutch version if the dictionary files were available at a reasonable cost.*

Perhaps you should gang up with some other Dutch Amiga users and petition Softwood and Digita to try to get them to support your languages.

ZIP SERVICE

I recently bought an Iomega Zip drive, having been assured that it would work with my Amiga 1500 SCSI controller, but without realising that there was no software or support forthcoming from the manufacturers for Amiga users.

Not being an Internet user, I was unable to download Amiga Zip Tools, but was able to obtain a copy from Online PD. I still had considerable difficulty formatting the drive until I eventually realised that I needed to cancel the "bootable" feature. From then on, it went according to the instructions. I now have it up and running and am very pleased with it.

However, shortly after buying the drive I called the Iomega technical helpline explaining that I was trying to use the drive on an Amiga and what help could they offer me.

I was absolutely amazed to get the reply that this was the first time they had heard of this problem. Having informed them that they now had heard of it, I was assured by a young man (who shall remain nameless as I don't want to embarrass him) who was really trying to be helpful that he would download the Amiga Zip Tools and send them to me. And he did! That's what I call service.What appals me is that Amiga owners do not seem to have been making it plain to Iomega (and other manufacturers who do not recognise the Amiga) that they are still a considerable international market force with money to spend. We should be making our voices heard, making a fuss, insisting upon being taken into account!

Mrs. I. Hooker
Minchinhampton

Well, actually, the Amiga is able to use the Iomega drive perfectly well as just another removable SCSI device.

It isn't imperative to have the special Zip Tools, unless you want to use the features to password protect or write protect the cartridges. HDToolbox will be able to find and partition a Zip drive fine.

If you had bought the drive from an Amiga stockist, you would have been supplied with the Amiga Zip tools – the original Amiga Zip tools were created by Hisoft.

I'm sorry you've had a problem, but I'm glad Iomega sorted it out for you.

CHOCOLATE SOFTWARE

I have just installed *MagicTV2*, a software AGA flicker fixer by BlackArts. It's absolutely marvellous and everybody should be using it. It's an excellent program and it's Chocolateware (in other words, send the author a bar of chocolate, preferably a Gold bar). You can get this fine program from http://www.angelfire.com/nc/e1999

Also, have seen many complaints about getting through to Shareware authors. I'd like to say that I faxed Oliver Kastl, Elaborate Bytes, IDEFix 97 software and had a return fax withing an hour with my key.

With reference to your review of the Power Tower (Feb98) I believe that this is actually very poor value for money. For example, the keyboard interface from Power Computing costs £29.95 while a PC keyboard costs between £11-£16. This makes the total cost of the tower as £104. The tower should be a fraction of that. Talk about making a profit out of the Amiga. I doubt you'll print this letter as you take so much advertising from Power. I think you will find that the EZ Tower from Eyetech is much better value for money and offers more features. You would have to give this one 110% if the Power Tower was worth 97%.

A little suggestion to improve your adverts would be to get the suppliers to mark products on the adverts which were in stock when the advert was placed or continued. I have been trying to get a scandoubler so I can use a PC monitor. They have been advertised since last December and are still not available.

Anyway, enough moaning. Keep up all the good work.

Lee W. Gravestock
Dunstable

There are, as you have discovered, at least as many Shareware authors who are prompt and courteous as there are those who are a bit slack.

At AF our advertisers aren't treated with kid gloves, so I have no problem printing your opinion – but I do disagree with it. The tower kit isn't just about the box (which would cost around £50-£60) but also about the sidepanel and modifications which make it easy to fit the Amiga, the specially made power cable and all the other work that goes into it. I don't quite see why you think the EZ Tower is so much better value (considering it's the same price), but you are entitled to your opinion. I'm afraid ads are never likely to carry stock level details as it takes up too much room and would be well out of date by the time it was printed. But it is rather foolish to advertise products which aren't in stock or aren't likely to be.

WRITING TO AMIGA FORMAT DO'S AND DON'TS

DO write to us on any topic you like, as long as it has some relevance to the Amiga or *Amiga Format*.

DO use email if you prefer. The address is amformat@futurenet.co.uk, but be sure to use the subject "Mailbag" or your mail won't be read.

DO try to make sure what you are writing will be of interest to other readers, or that it raises some valid point.

DO make some sort of effort to make your letter legible. If we can't read it, we can't type it in.

DO keep your letter concise and to the point. If it is two pages of A4 then we'll probably get bored and bin it long before we reach the end.

DON'T bother writing to tell us that you agree with a previous letter if you aren't going to add anything to the debate.

DON'T write including a personal letter/disk to someone who appeared in Mailbag two or three months ago – we won't still have their address.

DON'T address technical queries or reader ads to Mailbag – your letter will be put in the wrong pile and then it may never come to the attention of our technical experts.

DON'T include an SAE. We are far too busy to reply personally and you are just needlessly giving money to the Post Office.

DON'T forget that we occasionally award a Star Letter prize, if your letter is funny enough or is jolly helpful.

AF Reader Ads

Need to upgrade to play *Quake*? This is the place to sell your old gear and pick up some bargains to improve your system.

For Sale

● **A1200 6Mb RAM, 170Mb HD,** Goliath power unit, MIDI interface, Bars and Pipes, Wordworth, Turbocalc, Datastore, Distant Suns, GB Route, loads of games, £425. ☎ Steve 01606 853367 (evenings).

● **CD³², near mint,** little used, boxed. Offers around £55. Buyer collects or pays postage. ☎ Alan Holden 0191 3711362 (after 6.30pm) or email manofkent@enterprise.net

● **A500+, 64Mb HDD,** 4.5Mb RAM, hand scanner, several joysticks and mice, loads of software, £70 ono. ☎ 01420 561087.

● **A2000 computer, WB 2.04,** CSA 25MHz accelerator, 3 drives, £80. 1991/95 magazine disks, cover and ordinary, £10. ☎ 0181 2922394.

● **Tower A4000, 32Mb RAM,** PC Bridgeboard, 8Mb RAM, H/Scanner, software, 3 floppy drives, 2 CD-ROMs not seen before. Must go. Unwanted hobby, years of collection. Will sell individually. Includes printer, CD³² emulator and games. ☎ Cliff 01252 342916.

● **A4000/'030, 160Mb HD,** 14Mb RAM, CD-ROM, stereo monitor, KRP Editor, Lola 2000 Genlock, Prograb 24 grabber, Effects Processor plus Dpaint, Wordsworth, AMOS Pro, Scala, ImageFX, Platinum Works, etc. £975. ☎ 01428 604633.

● **Amiga hand-held scanner,** £15. DPaint V, boxed, £10. ☎ 01527 861486.

● **Amiga 600,** 2Mb RAM upgrade, Workbench 2.05 and disks to go. Many boxed games and utilities, £85. ☎ Paul 01484 644692 (after 5pm weekdays, anytime Saturdays and Sundays).

● **A1200 with new power pack,** mouse and tabletop workstation. Also, many games and Commodore MPS1230 printer (black and white). Any reasonable offer considered. Will separate. ☎ 01932 848747.

● **Loads of software and hardware** for A500 and A1200. Games have no box but include manuals/instructions. For full list, send sae to P. Tompkins, 341 Kenton Lane, Harrow, Middlesex, HA3 8RT.

● **Amiga 1200 with 68030,** 40MHz accelerator, FPU, 10Mb RAM, 340Mb HD, Philips monitor, video and sound samplers, loads of software and magazines. All for only £300. ☎ 0151 2001067.

● **A1200, 4Mb RAM** board with clock and FPU socket. Speed up your Amiga for just £30. ☎ Glenn 01707 320265.

● **2 A500/A500+ GVP impact** series II hard drive units, plus SCSI hard drives. £100 each. Also, GVP accelerator for the A1500/A2000, 25MHz CPU and FPU (68030 EC), £100. Email Stefan Cserfalvi Young at Scy@scysoft.demon.co.uk

● **A1200 with 370Mb hard disk,** external drive, mice, joystick, dot matrix Star LC-20 printer, games, 100Mb pre-installed, PD software and coverdisks. Buyer must be able to pick up. £300, mint condition. ☎ 0141 9426749.

● **CD³², standard with sernet cable** and software. Ideal CD-ROM or AGA machine, £80 ono. ☎ John 01772 337532 (after 6pm).

● **Amiga 1200 Magic Pack,** 170Mb HD, 6Mb RAM, loads of software installed and on disk. External disk drive as new, boxed, all manuals and software. £225 ono. ☎ 0181 2523357.

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● **Microbotics MB1230XA** accelerator, 68030 and 68882, 50MHz, MMU, clock, fitted 8Mb SIMM, original box, manual, software, fan (recommended for Lightwave, Imagine jobs), £100. LW3.5, £50. IM5, £50. ☎ 01405 860798 (after 6pm).

● **A4000, '040/40,** 50Mb RAM, 730Mb SCSI II HD, SCSI II CD-ROM, Cybervision 64/3D with scandoubler, dual monitor system, V-Lab capture card, Star LC10 printer, Internet ready, tons of software, £1,200. ☎ Dan 01962 886068.

● **Amiga games and hardware:** 4-way buffered interface, £20; IDE cables, £10; PC tower, £10; 8x IDE CD-ROM, £35; Audio mixer lead for CD-ROM, £10. ☎ 0161 4323226 (after 4pm, ask for Peter).

● **Amiga 1200, fairly new.** Includes original Workbench 3.1 disks, 128Mb hard drive, Wordworth 4DE, Personal Paint, Organiser 1.1, Datastore, Turbocalc and Photogenics. All manuals included along with some great games. £200. ☎ 01603 423079 (after 4pm).

● **A500, 3Mb memory,** 20Mb A590 HD with two external floppy drives. Lots of PD software on HD. £80 ono. ☎ 01604 671527 (after 5.30pm) or email dan@cribbin.demon.co.uk

● **Gigamem virtual memory** system, Ron Thornton Space Craft Design video for Lightwave 3D, Space Essentials 3D Object Set, Amiga 3D Construction Kit plus video, plus loads more. Offers? ☎ 01923 350760.

● **Infinitiv 1300,** 1.2Gb HD, 10x CD-ROM, M1438S monitor, 68030 LC/4Mb, accelerator, 28800 modem, £650. Games for 1200, 500, CD32 and Amiga Format/Power magazines with disks/CDs. Send SAE for list to D.M. Ellis, 7 Chaucer Crescent, Kidderminster, DY10 3XF or email mickey@enterprise.net

● **Amiga nut needs good homes** for lots of faithful companions – 500s, 500+, 600, 1200, CD32 plus lots of drives, printers, cards, games, etc. Call for details. ☎ 01757 210651 (after 6.30pm).

● **A500, 1Mb upgrade,** two joysticks, mouse, Tandy printer plus 150 demos and PD games, £80. ☎ 01752 895120. Original games £5. Send SAE for list to 16 Paddock Drive, Ivybridge, Devon, PL21 0UB.

● **Games: Liberation, Megalomania,** Flight Sim 2, Leisure Suit, Ishar, Utopia, Elite, Wings, Realms, Life and Death, ProFlight, Civilization, Worms. Approximately 150 titles owned by Amiga family, £4-£10. ☎ 01322 663624.

● **Original boxed games,** 25, £3 to £7.50 or £120 for all. DPaint III manual, £4. Three way SCSI cable, £5. Parallel printer cable, £5. ☎ 01709 814296 (ask for Terry).

● **A1200, 10Mb RAM,** 170Mb hard drive, Classic Squirrel with Reno 2 speed CD-ROM drive and Philips monitor, £400 ono. ☎ 0181 5981363.

● **Panasonic KXP-2123** colour printer, 24-pin extra buffer chip installed, lead, manual, boxed, £50. Also, 2Mb A500 KS2.05, £45 or together £80. ☎ Bill 01762 344641.

● **Infinitiv tower with extras.** Z3i board rev6.7, Apollo '060 accelerator with patcher, A1200 computer, '030 50MHz Blizzard accelerator, 250W power supply. Everything brand new. Sensible offers only, can post. ☎ 0174 887610.

● **A1200 Blizzard 68030,** 50MHz FPU, 16Mb RAM, SCSI interface, Squirrel, Syquest EZ135, 9 x 135 cartridge, 850Mb HD, 2x CD-ROM, 14400 modem, Cumana external floppy, 1084S monitor, Power Computing colour hand-scanner, Pro-Grab 24RT plus digitiser, £500. ☎ 01670 787535.

● **Classic Squirrel interface,** £35. CD-ROM SCSI internal 8x speed, £55. ☎ 01436 678 262.

● **Turbotech clock cartridge** for A1200. Battery backed, fits into external disk drive socket or back of external disk drive. Software and documents included. £10 (plus p&p). ☎ 01855 831735 (after 6pm).

● **Subversion, California Games 2,** Heimdall 2, boxed, £5 each. AGA Experience 1, £10. 2Mb SIMM, £5. 44-40-Pin stepdown board with 3 header 44-pin cable, £13. email d_hewitt@hotmail.com or dan_hewitt@yahoo.com

● **Reno portable CD-ROM** with battery base and PSU. All cables and software included. Boxed, £85, including p&p. Andrew Jackson, 7 Nut Tree Close, East Huntspill, Somerset, TA9 3PN or ☎ 01278 787095 (after 6pm).

● **Viper '030 accelerator** for A1200, £30. Squirrel SCSI interface, £20. Zappo CD-ROM drive, fits PCMCIA slot, £30. A1200 keyboard, £10. Buyer collects or pays postage. ☎ John 01535 654498.

● **Modem, 33.6bps,** cables, net/web, ibrowse software (Power Computing, bundle one). Without free Demon ISP. £75 only, one month old due to upgrading. ☎ 01436 678262.

● **A1200 memory card** and 68882 FPU, £40. 4Mb SIMM £8, Wing Commander £5, Monkey Island 1 £5, 2x CD-ROM (SCSI) £45, Classic Squirrel £30, Breathless £8, Premier Manager 3 £3, Impossible mission 2025 £4. ☎ 01663 742228.

User Groups

● ☎ **the original X Zone (BBS)** 01635 820590 (6pm to 1am weekdays, 2pm to 2am weekends). The latest files, friendly sysop and no ratios for all. Est 1996.

● **Is there a user group** in the Preston, Lancs area? If so, please contact Brian ☎ 01772 736164 (after 5pm).

Personal

● **Amiga contacts wanted** to swap PD demos, etc. and talk Amiga. Write or send disk to S.A. Heggie, Flat 1, Coachhouse, The Terrace, Royal Dockyard, Pembroke Dock, Dyfed, SA72 6YH.

● **Contacts wanted** for all Amigas to swap games and utils, etc. Send list to R. E. Taylor, 7 Lansbury Avenue, Rossington, Doncaster, DN11 0AA or ☎ 0831 521066 anytime.

● **Anyone with knowledge** of or interest in Grac2 or just the Amiga in general (games, utilities, knowledge, swapping). Write to Richard McLoughlin, 18 Eastwood Avenue, Little Hulton, Worsley, Manchester, M28 0HG.

Wanted

● **Cyberstorm or Warp engine** '040, 40MHz accelerator for A4000 '040, V-Lab video card for A4000, SCSI 4Gb hard drive. Must be SCSI 1 connector. Email Stefan Cserfalvi Young at Scy@scysoft.demon.co.uk

● **A500+ RAM expansion** and hard disk drive and set up floppy disk. ☎ 01908 631867 (after 6pm).

● **Championship Manager.** Do you know where I can get it? Please let me know. ☎ Ian 01733 202913.

● **Putty Squad.** Does anyone know where I can get a copy? Email mhysl@westminster.ac.uk or ☎ Boris 0171 6400188.

● **A1200, some games.** Will pay up to £100. 28 Abbey Crescent, Beacheif, Sheffield, S7 2QX.

● **64-pin SIMMS,** any size considered. 8Mb or above for GVP '030 board. Will pay any reasonable price as mine has gone down. Would consider full board with 16Mb Blizzard, etc. ☎ Clive 01432 354211.

● **Amos Basic compiler program.** Will accept coverdisk or original. ☎ Iain 01592 782378.

● **Eye of the Beholder 2,** full solution with maps urgently wanted. Will pay. Lozza, Villa Nova, High Street, Godshill, Isle of Wight, PO38 3HZ.

● **User manuals for ADPro** and Scala MM 300. Good price paid or will swap for any classic Amiga games in my collection. ☎ Iain 10677 450564 or email iana@zetnet.co.uk

● **Amos manuals.** Amos in Action by Len Tucker, Amiga Game Maker's Manual by Stephen Hill (good prices paid). ☎ Ron 01703 329639 (after 6.30pm).

● **AQInstall,** A600 or A1200 version. Reasonable price paid. ☎ Dave 01212 404997 (after 4pm).

● **Sensible World of Soccer 96/97.** ☎ Tony or Carol 01773 749078.

● **Photographer needed** for educational Shareware project currently under development. Contact Ross Carter, 16 Mayfield Road, North End, Portsmouth, Hants, PO2 0RW or ☎ 01705 64531.

● **Will swap Info Nexus 2** and Data Nexus and Organiser 2 for Multimedia Toolkit vol 2 or Sounds Terrific vol 1. Also wanted: Docs about the C64. All software original. Email hibisch@hotmail.com

● **Pro Gamble version 2** and Pro Greyhound. Full versions, not demos, reasonable price paid. Also, does anyone know the whereabouts of Ali Prior, last know address Leeds? ☎ 01282 779156.

● **Deluxe Music Construction Set** 2 from Electronic Arts. ☎ 01904 797700.

● **I need a 40MHz 68882 PLCC FPU.** Will swap with a 50MHz 68882 PGA FPU. I might buy FPU but swap preferred. Weekday calls after 5.30pm please. ☎ 01530 838291 and ask for Richard.

The Gallery

ON THIS MONTH'S CD

AFCD26:-ReaderStuff-/-Gallery-

In this Gallery special, Ben Vost takes a look at a collection of work by talented Amiga artist Phil Price.

Showcase

£50 AF Winner!

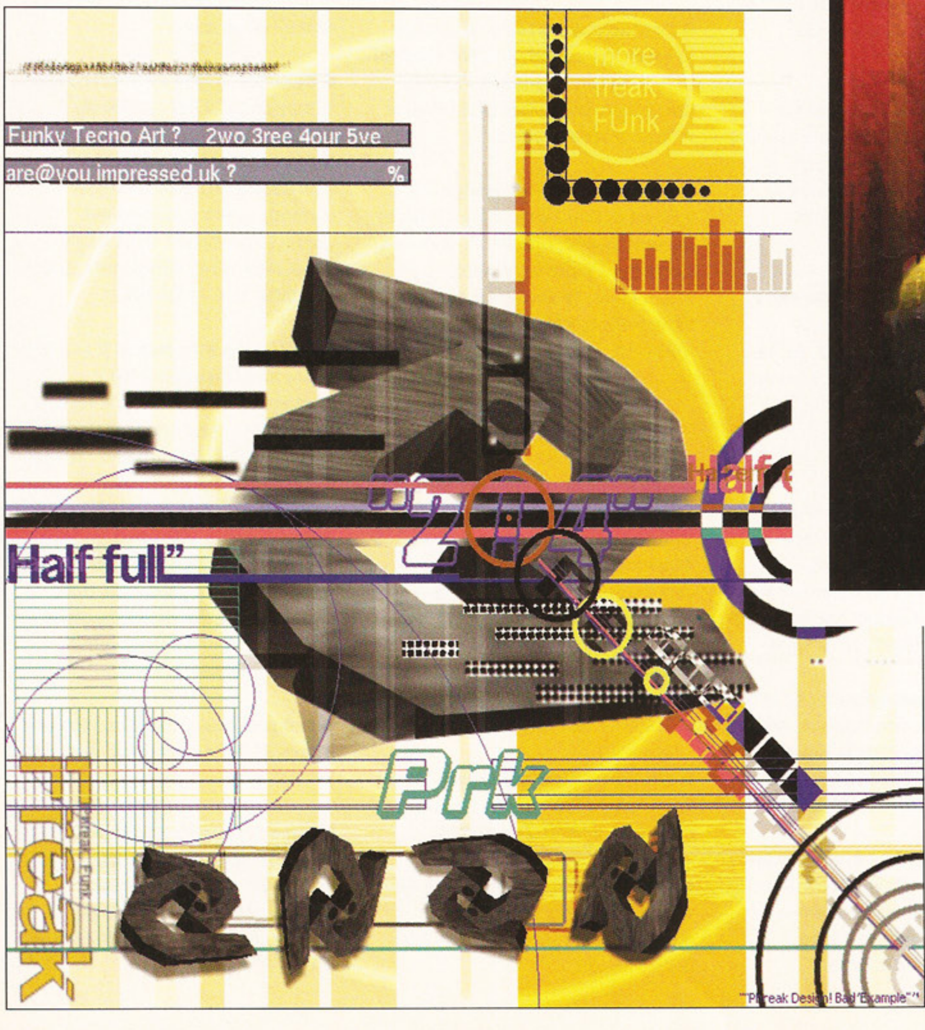
Amazingly for his accomplished artwork, Phil is just 13. He is currently studying art at school, where he has to use a PowerMac for illustration, but here's what he has to say:

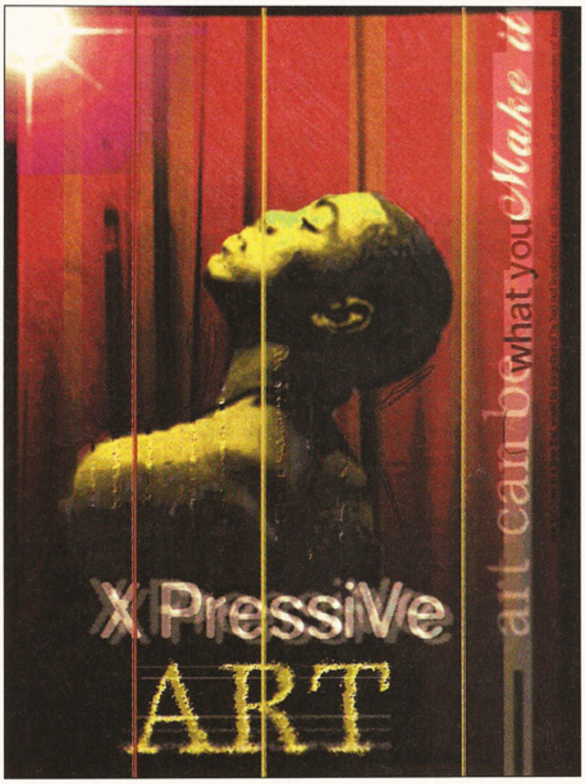
"I've been using Amigas ever since the very first A1200 was brought out. I never did much when I first had it because I was more interested in games at the time.

"Then I slowly came to my senses and started doing lame graphics in *Dpaint*, then I slowly progressed onto *DPaint 4* and on to what I do now. My inspiration comes from design groups like The Attic and The Designer's Republic, among others. I like strong lines and circles because they give a very modern feel.

"I think I am a testament to 'you can do it on an Amiga just as well as you can on a Mac' and 'You don't need an '060 to do good graphics, just keep on at it'.

"I hope to become a designer when I am older."





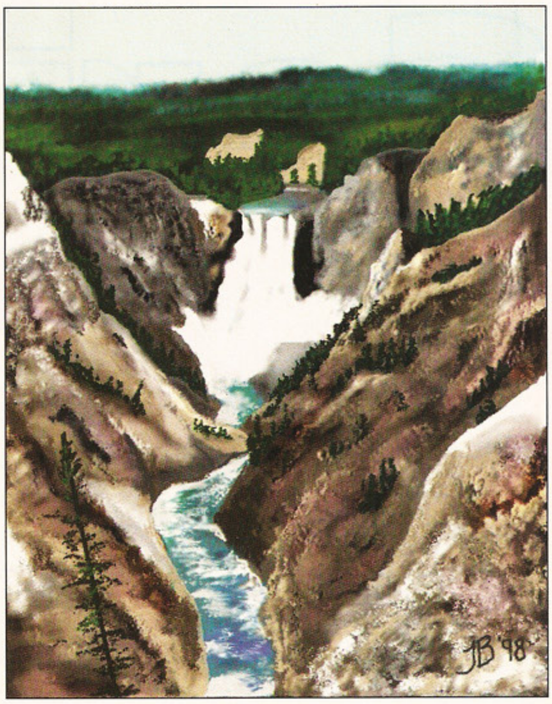
Expressive ART
"This was done in my favourite package, *Photogenics*, now at *v2*. The picture of the person was taken from the royalty-free images from your sister magazine, *Computer Arts*."

Freak Phunk
"This one was also done in *Photogenics*, *PPaint* and *Imagine*. That funky 3D thing was done by drawing a 2-colour map in *PPaint* and then importing it into *Imagine* and extruding it (the texture is generated white noise which has been motion blurred).

"Using *Photogenics*, I composed it on top of the background. The rest was painted in *PPaint*."



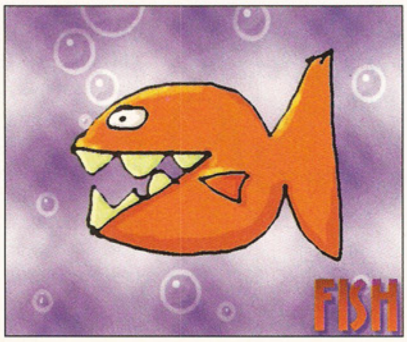
Cthulhu by A. Evans
Ahh, if only you'd sent your picture in earlier or later, Mr. (?) Evans, then you would have probably won the Gallery prize for this superb picture of majestic Cthulhu rising from the depths of the Atlantic. Sorry!

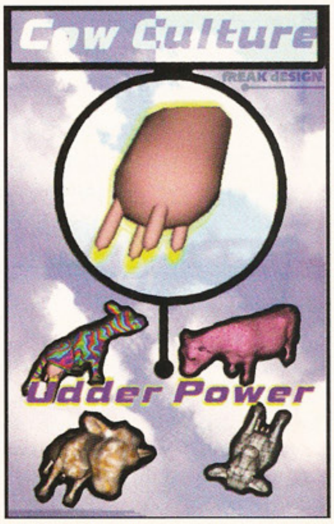


Yellowstone by Thomas Barnes
Again, if this were any other month and the competition were a little less fierce, this might have been the winning entry. Yellowstone was hand-drawn using a combination of *TVPaint* and that firm favourite, *Photogenics.*









FreakDesignPromo, Fish, CowCulture & MeanCorp
All by Phil Price



Serious disk



AMIGA FORMAT

Nick Veitch introduces *AF*'s latest great coverdisk bonus – a full version of *Personal Paint 7.0*!

PPaint 7.0

Full Package

This month we have a wonderful treat for you – the full version 7.0 of *Personal Paint*. This isn't some spurious made-up version either, it's the real thing. We've even managed to squeeze it onto a floppy disk so that all of our readers can enjoy it!

Personal Paint is an excellent tool for all sorts of different artwork, but improvements in this version make it especially excellent at working with web graphics and automated tasks, thanks to the inclusion of ARexx.

We will be providing some more tutorials on using ARexx with *Personal Paint* in future issues, but this month we have a special feature on the new strengths of this excellent package, so take a look at page 16.

For the rest of these pages we will deal with how to use and install the floppy version of *PPaint*. If you have the CD version of the magazine, it would be worthwhile visiting the CD pages of the mag to check out the extra goodies you're going to be getting before reading the feature at the front of the mag.



The Amiga's most powerful paint package is now yours for keeps!

> "...improvements in this version make it especially excellent at working with web graphics..."

RUNNING PPAINT FROM FLOPPY

If you don't have a hard drive, you can run this software directly from floppy. The coverdisk is NOT BOOTABLE, so in order to run the software, you will have to boot up in the normal way from Workbench.

When Workbench has loaded, you can then insert the *PPaint* coverdisk. *PPaint* doesn't need any assigns or further installation to run – you can simply double-click on the *PPaint* icon, and the software will load.

To fit this program onto a single floppy disk it has been compressed. This means it will take some time to load, as it has to be decompressed.

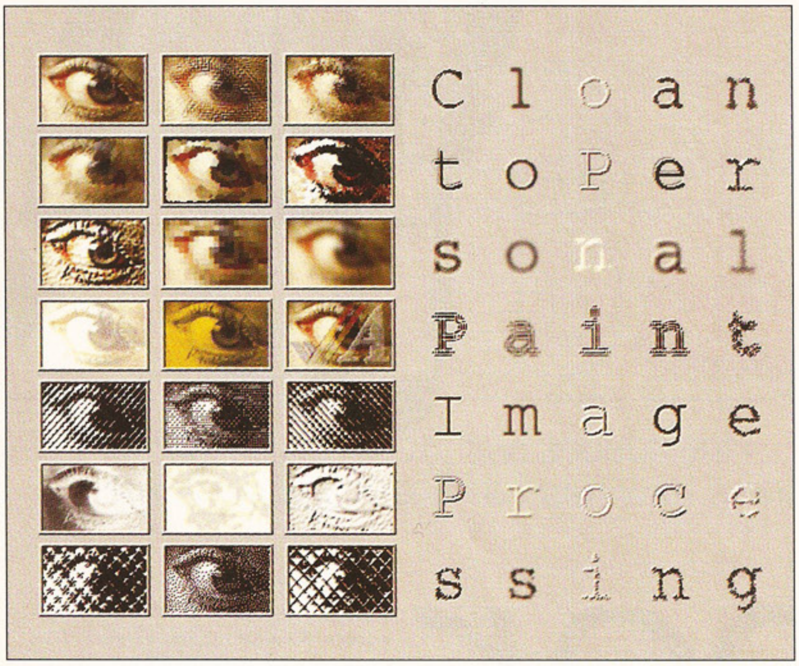
It may take a few minutes for the *PPaint* screen to appear. This is quite normal. As long as the disk is being accessed, something is happening, so just be patient. It might be an idea to have a blank formatted disk handy to save any pictures you create.

INSTALLING TO A HARD DRIVE

Installing *Personal Paint 7.0* onto a hard drive is very easy. You don't need to run an installer or anything, just copy the *PPaint* files into a drawer on your hard drive. This is best performed with a directory utility such as Directory Opus or something similar, but is also pretty easy to do from Workbench – just follow these simple steps:

1. Create a drawer on the destination drive (preferably called *PPaint*). You can use the Workbench Window>New Drawer menu option to do this, or just press Amiga-N.
2. Double click on the icon for the *PPaint* coverdisk. A window will open on screen, showing the *PPaint* icon and a readme file.
3. Click on the tile bar of the window in order to make it active. Then select Window>View>All files from the main Workbench menu.

Several drawers and files will now appear in the *PPaint* window.



Not only does PPaint support a wide range of processing effects, but in this version, you can use Arexx to automate this process

4. Select the entire contents of the window, either by clicking and dragging a square around them, or by choosing the Window>Select All menu item (or by using the hotkey Amiga-A).

5. Hold down the shift key and click the left mouse button with the pointer over the *PPaint* icon. Keep the button pressed down in order to keep all of the files selected.

6. Keeping this button pressed down, you should now drag the *PPaint* program icon on top of the folder you created for the program and release the button. There will now be quite a lot of disk activity as all the files are copied over.

There is no need to actually make an assign, but it may help other programs and files to locate the software if you do.

Simply edit your s:user-startup file and add an assign for the path *PPaint*.

For example: Open a shell window and type:

```
ed s:user startup
```

The ed program will now load up your current user startup.

Using the cursor keys, move to the bottom of the file and press return to create a new line. Then type:

```
Assign PPaint: Work:PPaint
```

Now use the menu to save (or press Escape, then x and return).

This example assumes that you have installed *Ppaint* into a drawer called "PPaint", onto a hard drive partition that you have called "Work".

DECOMPRESSING PPAINT

As mentioned previously, the main program is compressed in order to get it to fit onto a floppy disk. There is no reason for it to remain compressed if you have installed it onto a hard drive, so we have included a tool to decompress it for you.

You must perform this operation once you've copied all the program files to their destination directory.

Open up a Shell window and type:

```
cd work:ppaint
```

(or wherever you have actually installed the files).

When the prompt returns you should type the following:

```
deplode ppaint
```

There will be some disk activity and them *PPaint* will have been miraculously decompressed, ready for use.



Soon you'll be painting like a pro. Do remember to send your artwork in to our gallery pages, and you could even win £50!

Upgrade Now!



We have given you version 7.0 of *Personal Paint*, which is a great leap forward over any previous versions. However, we are also giving you the chance to take advantage of a special limited upgrade offer to get the very latest version of this software. It has many updated features, most of which are detailed on page 21. Incredibly, we are able to offer you the upgrade for the frankly giveaway price of just **£14.99**.

To take advantage of this special offer, simply send payment by cheque or postal order, made out to Future Publishing Ltd., to the following address:

AF PPaint Upgrade Offer • Future Publishing Limited • Cary Court • Somerton • Somerset • TA11 6TB.

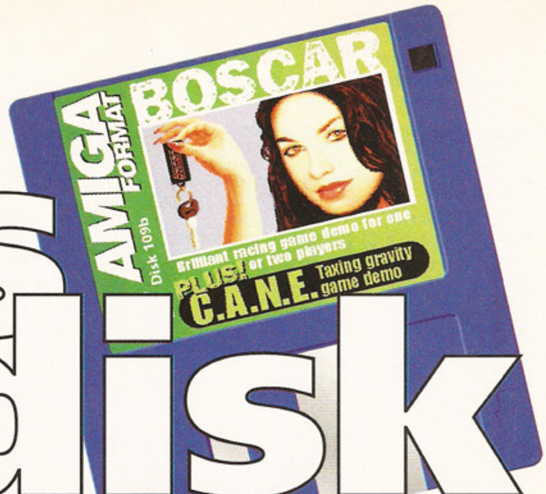
Or alternatively, call our order hotline on:

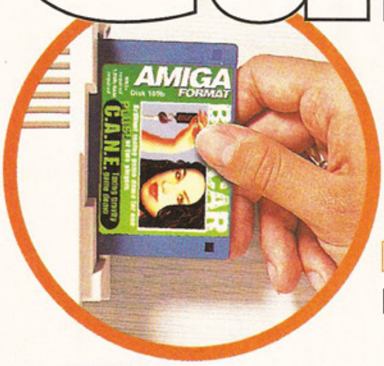
01458 271102

Please quote reference AMFPP7C when ordering this upgrade.

cloanto®

Games disk





AMIGA FORMAT

David Taylor introduces two great game demos – a racing game and a new mission-based gravity game.

Boscar

When *Boscar* has loaded you'll find yourself at the options screen. Here you can choose which track to play and what level you want to play at. There are two race tracks to choose from in this version, Beach Ride and Icenburg.

The first is a nice and easy stroll round the block with no obstacles, but the second is a more complex track and has ice all over the roads, which makes the car difficult to control. If you don't take care on the corners you'll go skidding off. You can play one or two players simultaneously. Choosing between them is done simply by ticking the option on the left of the screen.

The play screen is split into two levels anyway, with one player at the top and the second at the bottom if you have chosen two players. The computer will play all the other cars. You can also choose the level of expertise from Amateur through to Professional. To change the colour of the cars, simply click on the car as it rotates at the top of the screen and it will be resprayed.

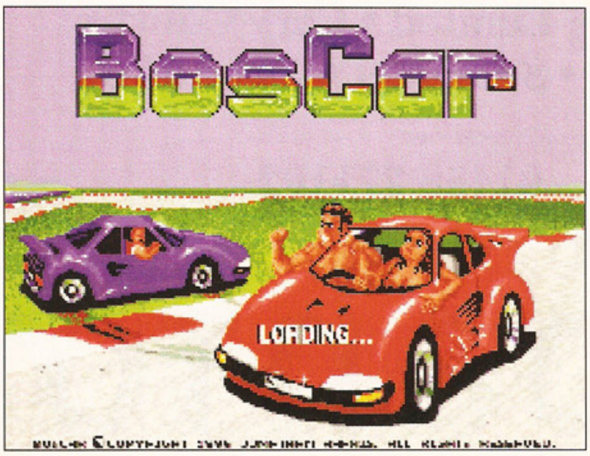
In this version you only have the quick race option, as the Grand Prix is only available in the full game. The final choice you have is Auto-Align. If you are easily lost in racing games then check this option as it will help rectify your car's course to keep it going the right way. If you come off the track at corners then Auto-Align will turn the car to put you back on track.

> "If you don't have auto-align enabled then you will be able to come off the track and drive across the dirt."

When you are ready to play, click on the Quick Race button and you will go to the overview of the race. This is where you are shown a view of the track and a description of the race. The difficulty level of the track is shown as well as tips (like don't cheat!) and the number of laps required to win.

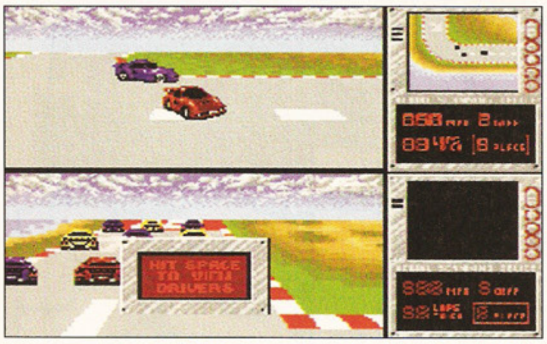
When the race itself starts you will be placed at the back, together with Player 2. All the computer cars will be yellow, unless you changed the default colour. Player 1 controls the car through the joystick (accelerate is fire, gears are automatic and pulling back brakes) while Player 2 has keyboard control (Shift is accelerate, alt is brake and < and > are left and right).

If you don't have auto-align enabled then you will be able to come off the track and drive across the dirt. This may seem like a great way to cut corners, but as the don't cheat hint mentioned earlier says, you won't win.





Bright arcade graphics and a wealth of options are available in this top demo. The full game promises even more.



Let the Amiga help you take corners as you get used to the game (above).

If you take short cuts you'll be shown at the back of the pack in your placing. You must go back onto the track at the point you left it to keep your position.

If you are only playing in single player mode then the second half of the screen can be used as a chase view. Press Space and the view will chase the car behind you or in front if you are coming last. On the right of your track view is a square that contains all your information for the race and at the top is an aerial view that tracks you. This lets you see what is coming up on the track so you can get ready for a corner. You can also see other cars as dots so you know how far ahead or behind they are.

Underneath this is your speed in miles per hour and the gear that you are in (out of five). The bottom line tells you how many laps you have left and, next to that, your position in the race.

The best way to get used to the game is to play with auto-align on and then turn it off, but be aware that the game is significantly harder to control without any computer aid. You also have the different difficulty levels to use if you get too good.

Boscar is an accomplished game with good graphics and very entertaining gameplay. The full version of the game costs £10 from the author, Jon Harris. Send your cheques to: 2 Leigh Road, Walsall, West Midlands, WS4 2DS.



C.A.N.E.

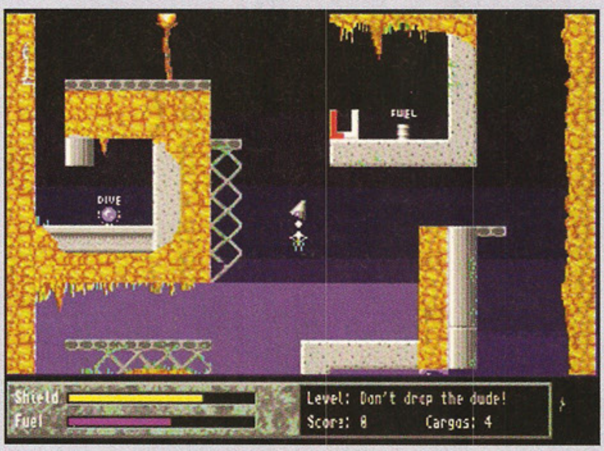
Cargo And Nothing Else (in case you were wondering) is an update of the old gravity game where you control your spaceship using thrusters and pointing the nose the way you want to go. Crash into anything or hit the floor and your ship is damaged until you are killed. Traditionally this game has taken the route of pitting two players against each other, with the last one standing winning, as it were. This game is designed for single players and supplies you with missions that you have to complete. At first this seems like it'll be quite easy – take the first level: pick up a guy and drop him off at the exit. Don't be fooled though, it's no stroll in the park. When you start the game you'll find a set of options along the bottom. Press Fire on Play and you'll start. Pushing up on the joystick will blast you off. If you let go, you'll slow and then start to drop back. In other words, gravity is in effect.

You have to get used to this to help you control the ship. Rotate the ship using left and right and then push forward to move the ship in that direction. You need to master the short burst of blasters in order to be able to hover (but beware because each time you start a blast, you'll use more fuel than one continuous blast) and also because if you just press forward all the time you will accelerate so fast that you'll be out of control. As you have a limited supply of fuel, shown by a bar in the bottom left of the screen, you also need to conserve energy. Above the fuel meter is a Shield meter. Light collisions with walls may not damage your ship, but don't think you can get away with it. It's very easy to go speeding into a wall and then bounce off onto another wall. Ricocheting like this will do you real damage. There are objects scattered around the screen to help you complete the mission.

On the first level you have four items of cargo, including one man, to pick up and drop off at the exit. Be careful with cargo as you can only pick up one item at once and it affects the weight and manoeuvrability of the craft. Hover over a piece to have it picked up by tractor beam. It will then hang under the ship. If you accelerate too fast then the cargo will drop off and that's not good news for the man hanging on! On the first level the best thing to do is go to the top of the screen and take the box of cargo to the exit first. This leaves more space for you to take the man through to the exit.

You also need to pick up the Dive icon to be able to fly underwater to get more cargo and the force and bomb to get the last piece. While flying around be careful of the magnets that will pull you in and damage your ship and eat up your fuel. There is one fuel dump on the first level that you can collect to refuel, so you don't have all that much to play with. As you play *C.A.N.E.* you will find that it's addictive but not something you can rush at. Plan how you'll complete the level before trying to fly it or you'll run out of fuel.

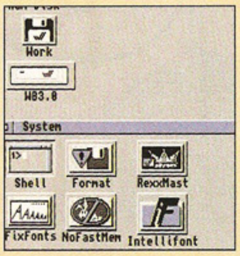
The author says that he won't release another version of the game with all the levels as he hasn't had sufficient response. His address is in the readme on the coverdisk.



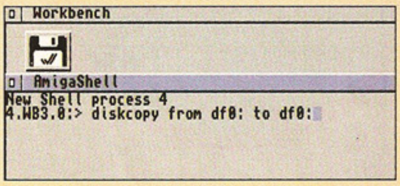
Carry the cargo and little people safely to the exit. Easy. Apart from the magnets, lack of fuel, limited space to manoeuvre, gravity...

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

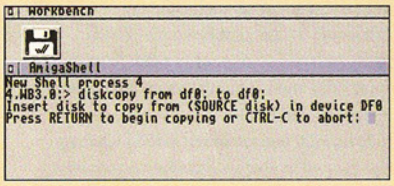


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

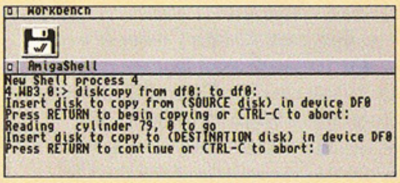


2 Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:

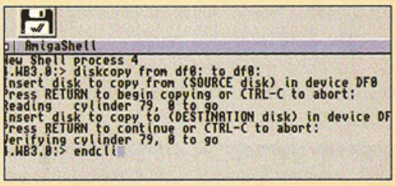
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

Amiga Format (insert name of disk)
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.

* **PPaint 7** * QuakePlayer/Myst patches * **phase 5 upgrades** * F1 Software * **Read**



Cover disc



AMIGA FORMAT

Congratulations! You have just bought the world's best Amiga CD-ROM. No other CD-ROM is as easy to use, or as friendly as ***Amiga Format CD 26***. Ben Vost explains why and introduces you to some of the things you'll be able to find.

We were pleasantly surprised with the feedback we received from our redesign on *AFCD25*. All of the comments we received were positive in the extreme, and our opinion of our CD was reinforced by an email we got from someone in America who said: "*Amiga Format* CDs were always good, but now they are unbeatable!"

It hardly seems worthwhile having these pages in the magazine to explain how to use the CD, but I guess we can fill them by telling you of all the great stuff we have on our disc this month.

GETTING STARTED

Getting going with an *Amiga Format* CD is one of the easiest things to do – just slide the disc into your drive and double click on the icon. We've found that there's no real need to start some script to be able to use our CD and we know you don't really like doing it, but if you really want to then you can find a script which will add the CD's assigns to your machine and perform a few other things too. Our CD is consistently laid out, making it easy to find what you want. Utilities and the like can be found in -Seriously_Amiga-, games-related gubbins in -ScreenPlay-, reader contributions of all sorts in -ReaderStuff-, and so on.

If that isn't enough, we also have our very own custom search facility called *AFCDFind* that can help you locate any file on any *AFCD*, present or past. You'll find *AFCDFind* in AFCD26:+System+/ and if you don't like the default viewers we use for files, you can always change them to suit your preferences by using *AFCDPrefs*, which is in AFCD26:+System+/Prefs. Don't worry about it changing anything on your hard drive, we promise you that all it will add is a file which is less than 1K in size to your ENVARC: directory. It won't change the way your machine works and it won't alter anything about your current setup. All it will do is make our CD better for you.

Lastly, there is nothing repeated on our CD from month to month, with the exception of some system files (mainly in the +System+ drawer) and some websites which only change every other month. If you think you're seeing something you saw on the last CD, the chances are that the Amiga Shareware scene is moving too fast for you to keep up with and what you've found is actually a newer version of a program that we had on a previous CD.

PPAINT 7

-CoverDisks-/PPaint

We go into great detail all about *PPaint* in our extensive feature that starts on page 16 this issue, so if you really need to know more about it, go there. All that remains for me to say here is that you can run the software from the CD, but you can also simply copy the entire *PPaint* drawer onto your hard drive and run it from there.

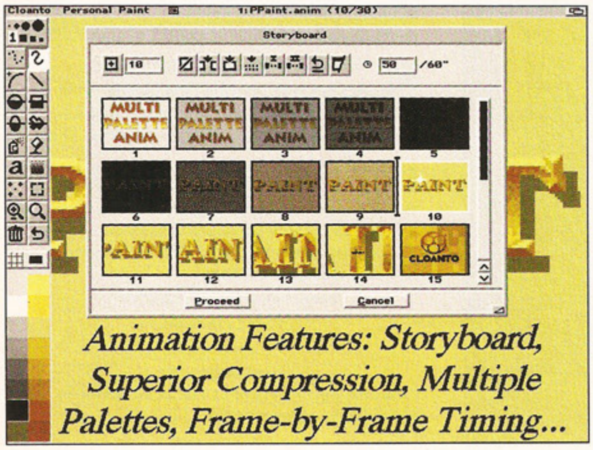
To make this method work, you'll want to add a line to your user-startup file in the S: drawer that reads:

```
assign PPaint: */PPaint
```

where the * is the path where you are putting *PPaint*.







The latest version of *PPaint*, the greatest paint package available on the Amiga. Check out our six page guide to getting the best out of this program, starting on page 16 now!

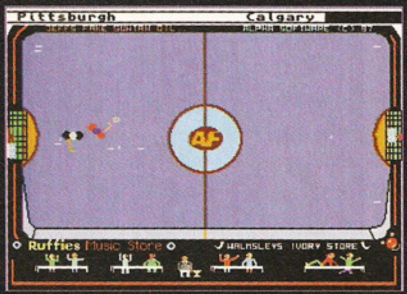
Your Stuff! -ReaderStuff-

I know I always say that we get cracking contributions from our readers, but it's absolutely true. Take a look at some of the stuff that we've got on this month's CD:

£50 Winner!

GARETH MURFIN

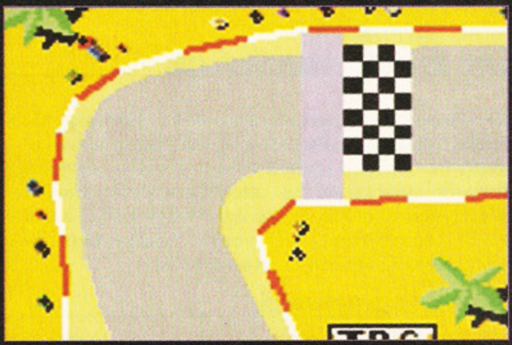
Gaz has been sending us stuff like CD contributions, long term tests, pictures, etc, for many months now. His output is prodigious: not content with updating one of the Amiga's most popular 3D games, *Gloom*, he's also working on an original project based loosely around *Resident Evil*, he's written scripts for AmIRC, some small utilities and he still found time to squeeze his A1200 into a tower case. This month he has bombarded us with not one or two programs, which we would of course be very happy with, but ten new products of his imagination. Our hats are off to you Gaz, you really deserve our £50 prize.



One of the ten new programs from Gareth this month. And he still had time to look at *Blitz Basic* for our long term review!

MIKE BONHAM

We're not sure about the name of your game, Mike (certain companies might be offended), but it's certainly great fun. Race your car around a set of simple tracks, picking up power-ups, bashing into each other. It's certainly nothing new, but up to six people can crowd around the keyboard to play it, so there's certain to be a bit of playful banter going around the room when you load this up after a hard night out at the pub!



Top racing action for up to six people, so you can humiliate your friends as you beat them round the track.

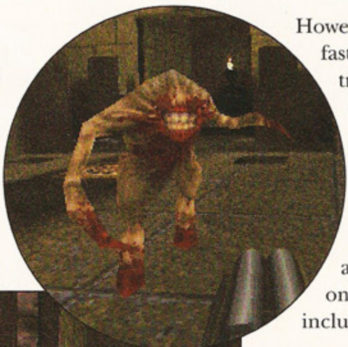
ARON POSTMA

Aron's in love with Sabrina Skunk, from our Eric Schwartz cartoon strip, but you can't hold that against him. He's also supplied some tracks for what must be the most popular user-upgradeable game on the Amiga, *eXTreme Racing*. There are several to play with here and you can also read Aron's entertaining take on the Amiga games scene in his guide file.

CLICKBOOM SPECIAL!

-ScreenPlay-/Commercial/myststuff
-ScreenPlay-/Commercial/quakeplayer

We have patches for you for *Myst* to bring it up to the very latest version, and since this requires a modern version of *Setpatch*, we've included that too. But I'm sure you're probably going to be more excited at the thought of being able to see *Quake* in action. *QuakePlayer*, included on this month's CD, gives you a taste of the action. It's exactly the same as the full game – the only difference is that you can't play it.





However, you can still see exactly how fast it will be on your machine, and try out some alternative levels by bringing up the console (by pressing ~ on your keyboard) and typing "playdemo" followed by the name of the demo (without the .dem bit). For instance, open the console and type "playdemo K1A2" to get one of the extra demos we've included for you.



Two of the best games of the year? Patches for *Myst* (above) and a demo of *Quake* (top), can both be found on this month's CD.

PHASE 5 UPGRADES

-Seriously_Amiga-/Commercial/phase5

If you have a phase 5 product like a graphics card or a PPC board, and you haven't got Internet access, you might find it difficult to get the upgrades that your machine needs. Here's the solution. Buy our magazine every month and get your upgrades on our CD!

We've got files for PowerPC support, CyberGraphX support, demo programs and all sorts of other stuff here.

F1 SOFTWARE

-Seriously_Amiga-/Commercial/F1Software

F1 Software are well-established as one of the Amiga's premier Shareware libraries in this country. They've been resident on our CD for some time now, but it may be that some of you have missed the drawer they have, in -Seriously_Amiga-. This month it contains a fair selection of demos of products that they sell for you to go through. There's *Schoolboy Sixes*, a particular favourite of Dave Cusick's from a few PD Selects ago and *Magnetic Fiction*, a disk magazine with a superb interface that's a cut above the rest, offering scary stories to keep you awake at nights. There's also a lot more, so don't overlook this drawer.

READER REQUESTS

-In_the_Mag-/Reader_Requests

Ask and ye shall receive. In this month's Requests drawer you'll find all sorts of varied bits and bobs including the complete HTML 4 specification, instructions on how to write Installer scripts, the latest version of the Ixemul libraries for all of those Unix ports and lots, lots more.

START YOUR ENGINES

-ScreenPlay-/OtherStuff/F1GP_1998

The new Grand Prix season has started and already there's trouble. If you've already got the game, Oliver Roberts' new driver data will be invaluable if you want to race in the correct colours and with the right drivers (and no, you're not supposed to let your team mate win). For those who don't have Microprose's excellent driving sim, hold onto this CD because you'll be able to play it with next month's *Amiga Format*.

Continued ➡

At your fingertips

PPC ARCHIVERS

-Seriously_Amiga-/Shareware/Archivers

If you're one of the lucky ones who has a PowerPC board, you'll find that archivers still have to run on the relatively slow 68K processor that you also have. But no more! With the advent of *AFCD26*, you can now run TGZ, LZX, DMS and the like directly on your PowerPC.

GET THOSE SHADES ON

-Seriously_Amiga-/Shareware/Comms/Other/Miami30_Install

***Miami* is one of the best advertisements the Amiga has as a serious computer on the Internet, but there are a lot of people that disliked it's MUI interface before, preferring to stick with other stacks that offered a "proper" Amiga look. *Miami 3* allows you to choose whether you want a GadTools or MUI interface for it, and if you can't decide then you can always switch between them as you like.**

VIRUS WARNING!

-Seriously_Amiga-/Shareware/Virus/

Because you may get viruses on your system from other, inferior CDs, we strongly recommend that you run a virus checker at all times. Here are three brand new updates to current virus checkers so that you can rest easy when using other CDs.

A NEW VIEW

-Seriously_Amiga-/Shareware/Workbench/-DataTypes-

New datatypes are always something you should pay attention to. Although it's quite often hard to work out what version of a particular datatype you have, it's always worth checking it against the ones we have on our CD every month to make sure you're not behind the curve.

CHEAT YOUR WAY TO THE TOP

-ScreenPlay-/OtherStuff/SweetCheater

← If you're desperate for a hint on a game and you just can't wait for our games editor, Andy Smith, to get back from the pub, what's the alternative?

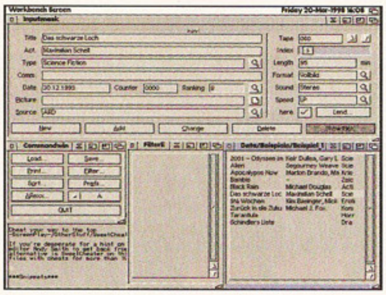
The alternative is *SweetCheater* on this month's CD. It's a collection of AmigaGuide files with cheats for more than 1,000 Amiga and CD32 games. Have fun!

SEX, LIES AND VIDEOTAPE

-Seriously_Amiga-/Shareware/Misc/MUIVideo

Although this has been written in German, that shouldn't prevent you from making use of what is actually a very decent, video-oriented database.

You can see from the screenshot that the amount of detail you can enter for each tape is very high, encompassing the source of the video and the format it's in (widescreen, NTSC and the like). It's Shareware, so to get the full feature list you should contact the author and pay the measly 25DM registration fee.



OK, so it may be in German, but it's still a very useful video database.

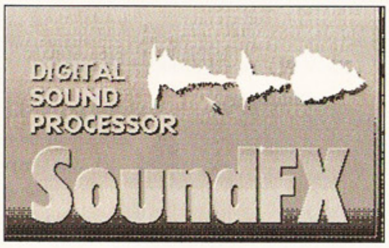
SOUNDS GOOD

-Seriously_Amiga-/Shareware/Sound/SFX

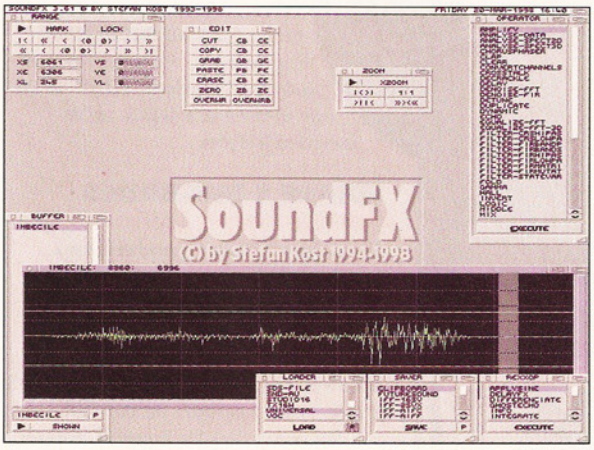
If you are at all interested in what could be described as the *ADPro* of the sound sampling world, you should make a beeline for *SFX*. It has more than 50 operators, 40 presets and it has more play routines than you can shake a stick at. This makes it truly universal and suitable for all Amiga users, from those with the bog standard Paula playback to those with a fast enough processor to be able to deal with 14-bit playback, to sound card users with an AHI module for true 16-bit playback. It even works internally to a 32-bit precision, ensuring that your work is being dealt with in the best possible way.

Stefan Kost, the program's author, has been working on the program for four years now, incorporating suggestions and improvements from his registered users and constantly improving the program. The result is excellent. To install it from our CD, pick a binary drawer from the selection available and double click on the appropriate install icon therein. Then do the same with the data drawer and lastly with the doc_eng drawer.

You may get asked if you want to update or backup the files with this one so choose update. Whatever happens, make sure you pick the same location for all three installs.



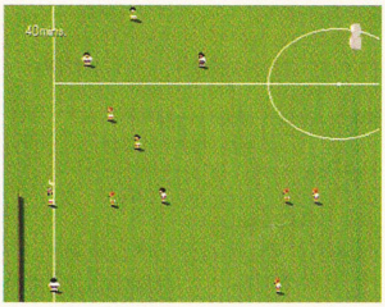
Top quality sampling, suitable for all Amiga users, with *SFX*.



INSTALL THAT GAME!

-ScreenPlay-/HD_Installers





Get all your classic Amiga games installed to your hard drive, including the ace *Sensi Soccer* (above), and *Spack Hulk* (top).

We have a new drawer in the ScreenPlay section of the CD this month. We get so many hard drive installers for every CD we decided to give them their own drawer at the root of the -ScreenPlay- directory. This month is no exception as we have installers for 49 different titles, from *Agony* to *Whizz*.

DISCLAIMER

This *AFCD* has been thoroughly scanned and tested at all stages of production. We recommend that you always run a virus checker on ANY software before running it. Future Publishing Limited cannot accept any responsibility for disruption, damage and/or loss to your data or your computer system which may occur while using this disc, the programs or the data on it. Ensure that you have up-to-date backups of data contained on your hard drives before running any new software. If you do not accept these conditions, do not use this disc.

DISC NOT WORKING?

If your *AFCD* is defective, please return it to the address below. Please make sure that you have followed our installation procedures correctly to ensure that there is no physical problem. Please send us the *AFCD* along with a description of the fault (not forgetting your name and address). A new working version should be returned to you within 28 days. The return address for faulty discs is:

CD Systems • VDC House
House Way • Wembley
Middlesex • HA9 0EH

Your *AFCD* should only need replacing if the CD itself cannot be read. If, instead, you are experiencing problems with an individual application, phone our technical support line. This is open between the hours of 2pm and 5pm every Tuesday.
Tel: 01225 442244
Fax: 01225 732341
email: amformat@futurenet.co.uk
("Coverdisc" in the subject line).

Please note that the helpline staff provide assistance with technical problems directly related to the CD and cannot provide training on the software or hardware in general.

AF 110 – MAY 1998

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If you have a feature idea, a long term test, a reader request or you want to be in the Amiga Angels list, send an email to bvost@futurenet.co.uk, with "Features", "Long Term Tests", "Reader Request" or "Amiga Angels" in the subject line accordingly. If you don't have email, a letter to the *Amiga Format* address with the same subject headings is also fine.

If you want to speak to us about a technical problem, we have a reader call day on Tuesdays. Call us on (01225) 442244 (10am–1pm, 2pm–5pm only). We're sorry, but we can't give games tips over the phone.

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The cars are ready, the pit crews are ready, the crowds are ready – are you ready for next month's sensational full game giveaway?

Microprose's F1 Grand Prix



PLUS:

Bucketloads of reviews including exclusives on **Quake** *and* **Genetic Species,** *the latest* **MasterISO** *and more tower add-ons !*

June Issue on sale Friday 15th May

The contents of future issues may be subject to change – no guarantee is implied or intended. But hey, at least we don't promise you things we have no intention of delivering...

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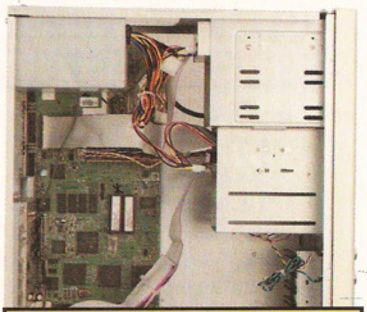
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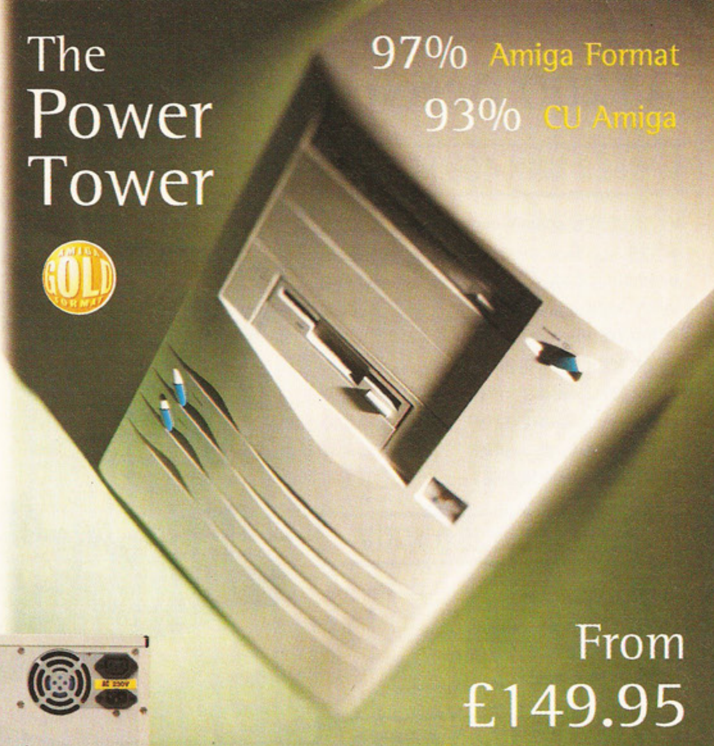
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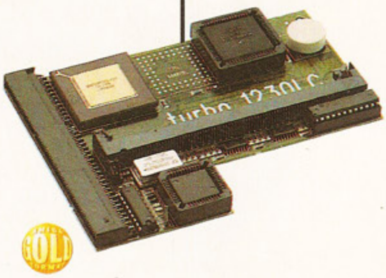
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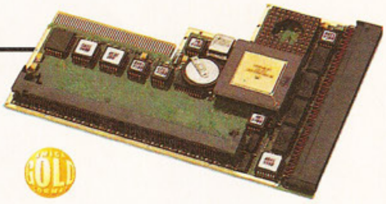
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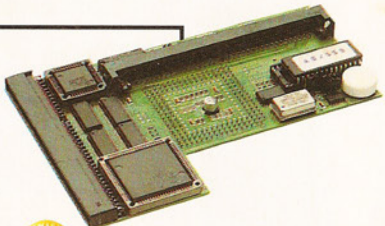
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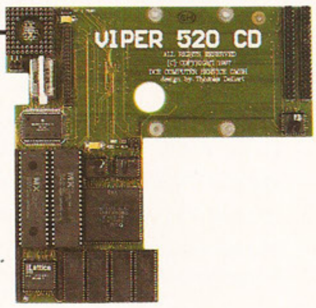
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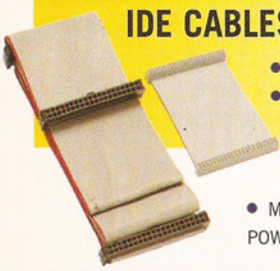
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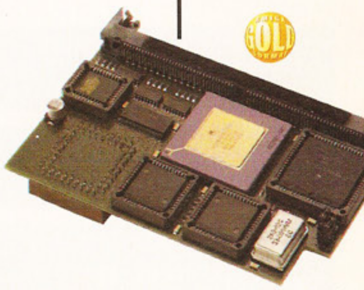
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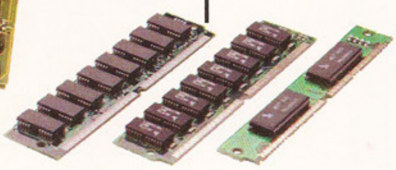
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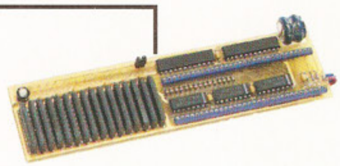


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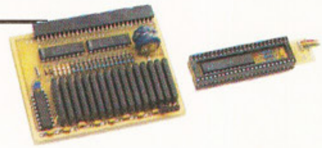
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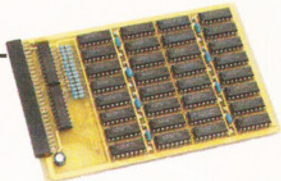
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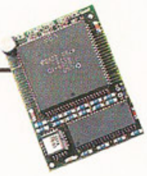
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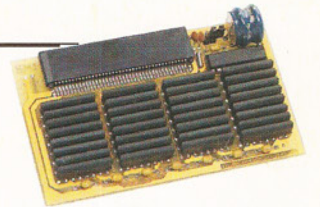
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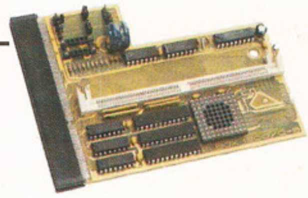
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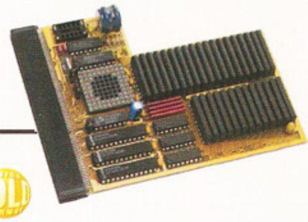
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